

2

THE ANNUITY AGREEMENTS OF COLLEGES AND UNIVERSITIES

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Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the faculty of Philosophy, Columbia University

PUBLISHED WITH THE APPROVAL OF
PROFESSOR E. S. EVENDEN, *Sponsor.*

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TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	
a. Significance of Problem	I
1. Liability attached to funds subject to annuity	I
2. Related study	I
3. Definition of terms	2
b. Scope of Study	2
c. The Problem	3
II. THE EXTENT TO WHICH COLLEGES AND UNIVERSITIES WRITE ANNUITY AGREEMENTS	
a. Procedure	6
b. Number of Annuity Agreements Written	7
c. Amount of Funds Subject to Annuity	7
d. Amount Paid to Annuitants	7
e. Relation between Amount Subject to Annuity and Productive Funds	7
f. Productive Funds of Institutions Writing Annuity Agreements	8
g. Size of Student Bodies of Institutions Writing An- nuity Agreements	8
h. Location of Institutions Writing Annuity Agree- ments	II
i. Summary	I2
III. PRACTICES EMPLOYED BY COLLEGES AND UNIVERSITIES IN HANDLING ANNUITY AGREEMENTS	
a. Procedure	I4
b. Practices Relating to the Acceptance of Funds Sub- ject to Annuity	I4
1. Bases for determining annuity rates	I4
2. Types of annuity funds accepted	I5
3. Types of assets acceptable	I6
4. Terminology	I7
5. Restrictions written into annuity agreements	I8
c. Classification and Management of Funds Subject to Annuity	I9
1. Classification of annuity funds	I9
2. Classification of annuity fund assets	I9
3. Management of annuity funds and annuity fund assets.	20

CHAPTER	PAGE
d. Reinsurance	22
e. Accounting for Annuity Funds	22
f. Accounting for Annuity Fund Assets	23
g. Accounting for Receipts and Expenditures	23
h. Reporting Funds Subject to Annuity	24
i. Summary	25
 IV. RISKS INCIDENT TO THE WRITING OF ANNUITY AGREEMENTS	 26
a. Introduction	26
b. Longevity of Annuitants	26
c. Income from Net Reserves	32
d. Investment of Net Reserves	35
e. Summary	39
 V. THE LIMITATION OF RISKS INCIDENT TO THE WRITING OF ANNUITY AGREEMENTS BY COLLEGES AND UNIVERSITIES	 40
a. Introduction	40
b. Acceptance of Funds Subject to Annuity	40
1. Schedule of annuity rates	40
2. Designation of annuity funds	41
3. Acceptable annuity fund assets	42
4. The annuity agreement itself	42
(a) Terminology	43
(b) Restrictions	43
c. Classification and Management of Funds Subject to Annuity	43
1. Segregation of annuity funds	43
2. Segregation of annuity fund assets	43
3. Use of annuity funds prior to death of annuitant	44
4. Administrative and promotional expenses	44
5. Reserve valuations	44
d. Accounting for Funds Subject to Annuity	45
1. Accounts for annuity funds	45
2. Accounts for the assets of annuity funds	46
3. Accounts for receipts and expenditures	47
4. Profits and losses on investments	47
5. Reporting funds subject to annuity	47

TABLE OF CONTENTS

v

CHAPTER	PAGE
VI. TRANSFER AND AVOIDANCE OF RISKS INCIDENT TO THE WRITING OF ANNUITY AGREEMENTS BY COL- LEGES AND UNIVERSITIES	49
a. Introduction	49
b. Reinsurance	51
c. Living Trusts	53
1. Definition	53
2. A substitute for annuity agreements	53
3. Types of living trusts	54
4. Varieties of living trusts	54
5. Advantages of living trusts	55
6. Some institutions now have living trusts	56
d. Principles Relating to Living Trusts	56
1. Basic factors to be considered in accepting living trusts	56
2. Basic factors to be considered in the classifica- tion and management of living trusts	57
3. Basic factors to be considered in accounting for living trust funds	57
4. Basic factors to be considered in reporting liv- ing trusts	58
e. Conclusion	58
VII. CONCLUSION	59
GLOSSARY	61
SELECTED BIBLIOGRAPHY	62

TABLES AND FIGURES

TABLES

TABLE	PAGE
1. Types of Annuity Agreements in Force in 82 Institutions	6
2. The Number of Annuity Agreements in Force in 82 Colleges and Universities	7
3. The Per Cent the Funds Subject to Annuity (1931-32) Are of the Productive Funds (1929-30) of 82 Colleges and Universities	8
4. Number of Colleges and Universities Having Productive Funds of \$400,000 or More That Have No Annuity Funds, That Have Annuity Funds, and That Did Not State Whether or Not They Had Funds Subject to Annuity	9
5. Size of the Student Bodies of the Colleges and Universities That Have No Annuity Funds, That Have Annuity Funds, and That Did Not State Whether or Not They Had Funds Subject to Annuity	9
6. Amount of Productive Funds Held by 153 Colleges and Universities Having Funds Subject to Annuity and by the 82 Institutions Reporting the Number of Annuity Agreements They Had in Force	10
7. Size of Student Bodies of 153 Colleges and Universities That Reported Having Annuity Funds and of 82 Institutions That Gave the Number of Annuity Agreements They Had in Force	11
8. Location of the Colleges and Universities That Have Productive Funds of \$400,000 or More and Who Reported Not Having Annuity Funds, Having Annuity Funds, and Making No Reply	11
9. Location of Colleges and Universities That Reported Having Annuity Funds and of Those Institutions That Stated the Number of Annuity Agreements They Had in Force in 1931-1932	12
10. Bases Used by 70 Colleges and Universities in Determining Their Schedule of Annuity Rates	15
11. Types of Annuity Funds Accepted by 70 Colleges and Universities	16

TABLE	PAGE
12. Types of Assets 68 Colleges and Universities Will Accept in Consideration of Annuity Agreements	16
13. Bases Upon Which 14 Colleges and Universities Will Accept Assets Other Than Cash or Real Estate	17
14. The Terms Used by 70 Colleges and Universities in Designating Their Annuity Agreements and the Financial Return Received by the Annuitant	17
15. How 70 Colleges and Universities Replied to Six Questions Regarding Restrictions Sometimes Written Into Annuity Agreements	18
16. The Type of Assets in Which 66 Colleges and Universities Invest Their Annuity Funds	20
17. The Practices Employed by 70 Colleges and Universities in Accounting for Their Annuity Funds	22
18. How 70 Colleges and Universities Replied to two Questions Regarding their Accounts for Annuity Fund Assets	23
19. How 70 Colleges and Universities Handle the Receipts and Expenditures Incident to Annuity Funds	24
20. The Items 61 Colleges and Universities Include in their Reports of Funds Subject to Annuity	25
21. Shows to Whom 58 Colleges and Universities Make Their Reports on Funds Subject to Annuity	25
22. An "Expectation" Table Constructed from Hunter's American Annuitants' Select Table of Mortality	28
23. Hunter's American Annuitants' Table	29
24. Number of Annuity Contracts, Amount Paid in Annuities, and the Gain or Loss from Mortality for the 41 Life Insurance Companies Doing Business in the State of New York in 1928-1931, Inclusive	30
25. Number of Annuity Contracts Each of Ten Life Insurance Companies Had in Force During 1928-1931, Inclusive	30
26. The Gain or Loss from Mortality Under Annuities of Ten Life Insurance Companies Doing Business in the State of New York for the Years 1928-1931, Inclusive	31
27. Dividend Yields on Listed American Preferred Stocks	33
28. Yields on American Bonds	33
29. Net Rate of Interest Earned on Mean Invested Funds of Ten Life Insurance Companies	34

TABLES AND FIGURES

ix

TABLE	PAGE
30. Net Reserves at End of Each Year When Annuity Paid is \$600 and the Income on the Net Reserve is 4% Compounded Annually	50

FIGURE	FIGURES
1. Stock Price Index and Monthly Averages of All Listed Shares	36
2. Average Monthly Prices of All Listed Bonds in Dollars .	37



PREFACE

American colleges and universities have received large sums from donors to enable them to provide educational opportunities beyond the secondary school. In some instances friends with deep interest in the work of an institution and with modest sums of money available have donated such sums on condition that the institution pay them a fixed annual return as long as they live. This practice has become of such importance that it seemed appropriate for the benefit of all institutions to study existing practices and the risks incident thereto.

Material for this study was secured through the cooperation of a Sub-Committee of the National Committee on Standard Reports for Institutions of Higher Education. The membership of the Sub-Committee is as follows:

President E. E. Rall, North Central College.

Comptroller N. C. Plimpton, University of Chicago.

Business Manager Ralph J. Watts, Lawrence College.

Director of Admissions J. Edward Todd, Carleton College.

Mr. Lloyd Morey, Chairman of the National Committee on Standard Reports, and the members of the Sub-Committee advised in the planning of the study. Mr. T. L. Hungate, Auditor of Teachers College, Columbia University, gave valuable suggestions during the course of the study. Professor E. S. Evenden and Professor M. C. Del Manzo, of Teachers College, Columbia University, criticized the study during its progress and offered suggestions for the improvement of the manuscript. Dr. Alfred Williams Anthony, Chairman of the Committee on Financial and Fiduciary Matters of the Federal Council of the Churches of Christ in America, and Mr. W. Walter Mincks of the Actuarial Department of the Equitable Life Assurance Society read the entire manuscript and made suggestions for its improvement. To these, and to the large number of persons representing the various colleges and universities who have cooperated in this study, the author wishes to express his

appreciation. Responsibility for such errors as may exist in the study rests with the author.

It is hoped that the results of this study will be of practical benefit and use to all institutions having or anticipating funds subject to annuity.

A. A. W.

New York City,
May 9, 1933.

CHAPTER I

INTRODUCTION

SIGNIFICANCE OF PROBLEM

Liability attached to funds subject to annuity.—In the acceptance and administration of endowment funds an institution agrees to maintain the principal inviolate and to use only the income. In the administration of such funds the institution assumes only the obligations of keeping the principal intact to the best of its ability and to use the proceeds for the purposes designated. In the acceptance of a living trust an institution agrees to keep the principal of the fund invested in suitable or designated assets and to pay to the trustor or specified beneficiary the net income or specified proportions thereof. In neither case does the institution assume obligations which might incur a loss. The acceptance of funds subject to annuity, which involve the payment of agreed sums as long as the annuitants live, involves, however, certain hazards which cannot be definitely measured. Among these risks are the following.

1. The length of time an annuitant will live is not definitely known; thus when an institution agrees to pay an annuitant as long as he lives, a specified sum which is greater than the income of the invested net reserves of that fund, the institution is assuming an uncertain obligation which may result in the utilization of the entire principal of the fund and cause the institution to draw upon its other resources. Furthermore, the amounts of the funds which are to be subject to annuity vary from agreement to agreement. If an institution has only five small annuity funds and one large fund pooled for investment purposes, it is possible for an unfavorable mortality experience in the case of the large fund to cause the disappearance of the entire amount subject to annuity.

2. There is the risk of realizing yields from invested net reserves which will be below the rates contemplated when the annuity agreement was written.

3. The risk of losing all or part of the net reserves due to the hazards attending investment and realization.

Related study.—A Sub-Committee on Annuities was appointed by the Committee on Financial and Fiduciary Matters of the Federal

Council of the Churches of Christ in America in March, 1927, "to study and recommend the proper range of rates, the form of contracts, the amount and type of reserve funds and the nomenclature to be used, to ascertain and to advise as to the legislation in the United States and the various states regarding annuities, their taxability, etc. This Committee is requested to make an immediate study of the matter of rates and to call a conference of interested parties on this matter at the earliest possible date. This Committee should be guided in its study by an early determination as to what is the primary motive in the writing of annuity contracts."¹

This Committee has issued four pamphlets reporting the papers presented at its conferences. Only one of its studies bears directly on the annuity agreements of colleges and universities. Mr. Paul C. Cassat,² Comptroller, Vassar College, sent a questionnaire to more than 400 colleges and universities. Data from 91 institutions in 29 states were collated. Mr. Cassat found that the annuity funds held by these institutions on December 31, 1929, were \$17,906,690.41. In this study, however, no distinction was made between annuity agreements and living trust agreements. The most important facts brought out in Mr. Cassat's study are: (1) that a large majority of the institutions cooperating tried to maintain 100% of the principal of the fund until the death of the annuitant, (2) that there was little agreement in terminology or in rates paid annuitants, and (3) that the average excess of annuity payments over income was less than 1% in less than one-half of these institutions, and nothing at all in the remainder. This study is incomplete and inconclusive, for it included only a small number of the factors involved in the handling of annuity agreements and made no distinction between living trusts and annuity agreements.

Definition of terms.—In order that uniformity in the interpretation of certain technical terms pertinent to this study may be assured, a glossary has been appended. (See page 61.)

SCOPE OF STUDY

This study does not concern itself with the factors relating to the solicitation of annuity funds or with the legal aspects of the

¹ *Methods and Plans in Using Annuity Agreements*, by Alfred W. Anthony, Federal Council of the Churches of Christ in America, New York, 1931, p. 10.

² "Annuity Agreement Business: Extent and Characteristics," *Methods and Plans in Using Annuity Agreements*, by Alfred W. Anthony, Federal Council of the Churches of Christ in America, New York, 1931, pp. 35-50.

problem, for both of these phases of the study constitute problems in themselves and do not bear directly upon the question as here defined. Such matters as taxation, supervision by state, and the legal status of annuity agreements are problems yet to be considered. This study does, however, concern itself with the acceptance of funds subject to annuity, their classification and management, and the accounting for and reporting of funds subject to annuity.

In this study all colleges and universities having productive (endowment) funds of \$400,000 or more were included except the Negro institutions, theological seminaries, teachers colleges, and junior colleges. Both publicly and privately controlled colleges and universities are included although only two publicly controlled universities reported that they had funds subject to annuity. Two hundred and ninety-six colleges and universities had productive funds of \$400,000 or more, and they were located in forty-one states and the District of Columbia.³ The states in which no college or university had productive funds of \$400,000 or more were Arizona, Delaware, Montana, Nevada, New Mexico, Utah, and Wyoming.

THE PROBLEM

The problem may be stated in the form of five questions.

First, to what extent are colleges and universities writing annuity agreements? The answer to this question should reveal the approximate number of colleges and universities writing annuity agreements, the number and major types of annuity agreements written, the number of annuity agreements written by the various institutions, the amount of funds subject to annuity, the amount of the annual payments made to the annuitants, the relationship between the amount of funds subject to annuity and the productive funds of an institution, and the size and location of the institutions that write annuity agreements. Only through a knowledge of these facts is it possible to know the size of this problem.

Second, what are the practices which these colleges and universities writing annuity agreements recognize in: (a) accepting funds subject to annuity, (b) classifying and managing funds subject to annuity, and (c) accounting for and reporting funds subject to annuity? The answer to that part of the question involving the practices recognized in accepting funds subject to annuity should reveal:

³ *Biennial Survey of Education, 1928-1930*, Vol. II, Chapter IV—Statistics of Universities, Colleges, and Professional Schools, 1929-30, 285 pages.

(1) the types of funds accepted; that is, what is the ultimate designation of the fund? (2) the types of assets accepted and the basis on which they are accepted; (3) the nomenclature used in designating the agreement itself and the return received by the annuitant, and (4) in accepting funds subject to annuity, what restrictions does the institution permit the donor or the annuitant to place upon the fund?

The classification and management of funds subject to annuity involves: (1) the methods of grouping annuity funds and annuity fund assets; (2) the types of assets in which annuity funds are invested; (3) the sources from which annuitants are paid when the payments exceed the income; (4) the disposition made of excess income over expenditures; (5) the question whether annuity funds designated for specific purposes are used prior to the death of the annuitant; (6) the protection afforded the annuitant and the institution through periodic reserve valuations; (7) the payment of annuity promotional and administrative expenses; and (8) the problem of reinsurance.

The practices which colleges and universities recognize in accounting for their annuity funds and annuity fund assets should show: (1) whether or not the accounts for annuity funds and annuity fund assets are grouped with the accounts for other funds and assets; (2) the funds and assets with which annuity funds and annuity fund assets are grouped; (3) the methods of accounting for individual funds; (4) whether or not receipts and expenditures for annuity funds are grouped with the receipts and expenditures for other funds; (5) how the income from annuity funds is classified; and (6) how the expenditures from annuity funds are classified.

Inquiry as to the methods employed by colleges and universities in reporting funds subject to annuity should reveal: (1) whether or not such reports are made; (2) the items reported; and (3) to whom such reports are made.

The answers to the second question in the general problem which relates to the practices which colleges and universities follow in accepting funds subject to annuity, classifying and managing funds subject to annuity, and accounting for and reporting funds subject to annuity should indicate whether or not there is any uniformity in practice and whether or not these methods agree with those which would be established by logic and by authority based upon experience.

Third, what are the risks incident to the writing of annuity agreements? It is one of the purposes of this study to describe these risks and indicate to what extent they may be measured.

Fourth, how may the risks incident to the writing of annuity agreements by colleges and universities be reduced to a minimum? A set of principles designed to limit these risks will be presented.

Fifth, how may the risks incident to the writing of annuity agreements be transferred or avoided?

In the following five chapters each of these problems will be analyzed. The procedure for finding the answers to the problems will be described and the results given.

CHAPTER II

THE EXTENT TO WHICH COLLEGES AND UNIVERSITIES WRITE ANNUITY AGREEMENTS

The extent to which colleges and universities write annuity agreements was ascertained through correspondence with the 296 institutions that have productive funds of \$400,000 or more. Mr. Lloyd Morey, Chairman of the National Committee on Standard Reports for Institutions of Higher Education, wrote a letter to the president or a financial officer of each of these institutions stating the purposes of this study and asking them to indicate on an enclosed post card: (1) whether or not the institution had funds subject to annuity; (2) whether or not the institution would cooperate in a study of this subject; and (3) to whom further communications should be sent. Of the 296 institutions to which this letter was sent, 230 replied: 153 institutions stating that they had funds subject to annuity and 77 stating that they had no such funds. Sixty-six institutions did not reply.

Two copies of an inquiry along with a letter of transmittal and a list of definitions of terms used were sent to each of the 153 institutions that indicated that they had funds subject to annuity. Eighty-two of the 153 colleges and universities responded to the inquiry regarding their annuity funds. All but one of these institutions were privately controlled.

Of the 1,738 annuity agreements in force at the close of the last fiscal year¹ in the 82 colleges and universities reporting, approxi-

TABLE 1. TYPES OF ANNUITY AGREEMENTS IN FORCE IN
82 INSTITUTIONS

LIFE ANNUITY AGREEMENT	JOINT-LIFE-AND-SURVIVOR ANNUITY AGREEMENT		TOTAL
	<i>Two lives</i>	<i>More than two lives</i>	
1,166	524	48	1,738
Median—7	1	0	9

¹ The fiscal year differs from institution to institution. The inquiry was sent out on January 6, 1933.

TABLE 2. THE NUMBER OF ANNUITY AGREEMENTS IN FORCE IN 82 COLLEGES AND UNIVERSITIES

NUMBER OF AGREEMENTS	NUMBER OF INSTITUTIONS
46 or over	8
41—45	3
36—40	2
31—35	4
26—30	2
21—25	6
16—20	6
11—15	6
6—10	15
1—5	30
Total—1,738	82

mately 39% were written by five institutions. These five institutions wrote 226, 174, 96, 89, and 82 annuity agreements respectively and had approximately 11% of the total funds subject to annuity. Each of these five institutions had fewer than 750 students. The median number of annuity agreements written by the 82 colleges and universities is nine, indicating that on the whole the majority of the institutions write a small number of annuity agreements. Table 2 presents these facts in tabular form.

The eighty-two colleges and universities writing annuity agreements had a total of \$16,291,360 subject to annuity at the close of their last fiscal year. This figure represents a large sum of money; and if returns had been received from each of the 153 colleges and universities having funds subject to annuity, it is estimated that the amount would reach and probably exceed \$35,000,000.

The amount paid to the 1,738 annuitants annually amounts to \$928,040, which is approximately 5.7% of the total amount of funds subject to annuity held by these 82 institutions.

The per cent the funds subject to annuity are of the total productive funds of the colleges and universities that reported the amount of their annuity funds is shown in Table 3. Because the figures regarding the productive funds² are for the year 1929-30 and the figures for the amount of funds subject to annuity are for the

²Office of Education Bulletin. "Statistics of Universities, Colleges, and Professional Schools, 1929-30." *Biennial Survey of Education, 1928-1930*, Vol. II, Chapter IV.

TABLE 3. THE PER CENT THE FUNDS SUBJECT TO ANNUITY (1931-32) ARE OF THE PRODUCTIVE FUNDS (1929-30) OF 82 COLLEGES AND UNIVERSITIES

PER CENT	NUMBER OF INSTITUTIONS
20.0% or over	7
17.5%—20.0%	3
15.0%—17.5%	6
12.5%—15.0%	1
10.0%—12.5%	3
7.5%—10.0%	14
5.0%—7.5%	6
2.5%—5.0%	15
1.0%—2.5%	15
Less than 1.0%	12
Median—5%	Total— 82

year 1931-32, the per cents are only rough approximations, but they do indicate to some extent the relative importance of the annuity funds as compared with the productive funds of an institution. It is of interest to note that one institution has annuity funds that are one and one-half times its total productive funds. Another institution's annuity funds are approximately equal to its productive funds, and a third institution has annuity funds that are about one-half as large as its productive funds. Two of these institutions have fewer than 250 students and less than \$750,000 in productive funds.³ The other institution has productive funds of approximately two and one-half millions, and its annuity funds are of about the same amount.

Table 4 shows the amount of productive funds held by those colleges and universities that have productive funds of \$400,000 or more but who do not have funds subject to annuity. This table also gives the same information for those colleges and universities that have annuity funds and for those institutions that did not state whether or not they had funds subject to annuity. This table seems to indicate that on the whole those institutions that have annuity funds have smaller amounts of productive funds than those institutions that do not write annuity agreements.

Table 5 shows the size of the student bodies of those colleges and universities that have no annuity funds, that have annuity funds, and of those institutions that neglected to state whether or not they

³ *Ibid.*

TABLE 4. NUMBER OF COLLEGES AND UNIVERSITIES HAVING PRODUCTIVE FUNDS OF \$400,000 OR MORE THAT HAVE NO ANNUITY FUNDS, THAT HAVE ANNUITY FUNDS, AND THAT DID NOT STATE WHETHER OR NOT THEY HAD FUNDS SUBJECT TO ANNUITY

PRODUCTIVE FUNDS	NO ANNUITY FUNDS	HAVE ANNUITY FUNDS	NO REPLY	TOTAL
\$15,000,000 or over.....	8	8	1	17
10,000,000—15,000,000.....	5	2	..	7
7,500,000—10,000,000.....	1	3	1	5
5,000,000—7,500,000.....	2	8	2	12
2,500,000—5,000,000.....	12	14	9	35
1,000,000—2,500,000.....	21	46	14	81
400,000—1,000,000.....	28	72	39	139
Total.....	77	153	66	296
Median.....	\$1,760,000	\$1,200,000	\$850,000	\$1,167,000

TABLE 5. SIZE OF THE STUDENT BODIES OF THE COLLEGES AND UNIVERSITIES THAT HAVE NO ANNUITY FUNDS, THAT HAVE ANNUITY FUNDS, AND THAT DID NOT STATE WHETHER OR NOT THEY HAD FUNDS SUBJECT TO ANNUITY

SIZE OF STUDENT BODY	NO ANNUITY FUNDS	HAVE ANNUITY FUNDS	NO REPLY	TOTAL
Over 10,000.....	4	6	1	11
5,000—10,000.....	5	3	..	8
2,000—5,000.....	12	5	4	21
1,500—2,000.....	4	7	5	16
1,000—1,500.....	3	11	7	21
750—1,000.....	3	15	5	23
500—750.....	16	34	8	58
250—500.....	23	59	33	115
Under 250.....	7	13	3	23
Total.....	77	153	66	296
Median students.....	630	535	480	565

had funds subject to annuity. An analysis of this table seems to indicate that on the whole a larger per cent of the small colleges write annuity agreements than do the larger institutions; however, the difference is not appreciable.

Table 6 gives the amount of productive funds held by the 153 colleges and universities that stated that they had funds subject to annuity and also gives the amount of the productive funds held by the 82 institutions that submitted reports on their annuity funds. This table indicates that the institutions that submitted reports on their annuity funds are fairly representative of the group of 153 institutions as far as productive funds are concerned. This table also reveals that over fifty per cent of the annuity agreements are written by colleges and universities having productive funds of less than one million dollars each.

TABLE 6. AMOUNT OF PRODUCTIVE FUNDS HELD BY 153 COLLEGES AND UNIVERSITIES HAVING FUNDS SUBJECT TO ANNUITY AND BY THE 82 INSTITUTIONS REPORTING THE NUMBER OF ANNUITY AGREEMENTS THEY HAD IN FORCE

PRODUCTIVE FUNDS	HAVE ANNUITY FUNDS	REPORTED ON ANNUITY FUNDS	NUMBER OF ANNUITY AGREEMENTS
\$15,000,000 or over	8	3	47
10,000,000—15,000,000	2	2	15
7,500,000—10,000,000	3	1	9
5,000,000—7,500,000	8	5	32
2,500,000—5,000,000	14	10	164
1,000,000—2,500,000	46	26	582
400,000—1,000,000	72	35	889
Total	152	82	1,738
Median	\$1,165,000	\$1,115,000	\$990,000

Table 7 shows the size of the student bodies of the colleges and universities that reported having annuity funds and of those institutions that submitted reports on the annuity funds which they possessed. An analysis of this table shows that the group of 82 institutions with which this study primarily deals is fairly representative of the group that reported having funds subject to annuity. This table shows further that almost fifty per cent of the annuity agreements are written by colleges having less than five hundred students.

Table 8 shows the location of the colleges and universities that have productive funds of \$400,000 or more and who reported not having annuity funds, having annuity funds, and of those who made no reply. This table seems to indicate that a smaller percentage of

TABLE 7. SIZE OF STUDENT BODIES OF 153 COLLEGES AND UNIVERSITIES THAT REPORTED HAVING ANNUITY FUNDS AND OF 82 INSTITUTIONS THAT GAVE THE NUMBER OF ANNUITY AGREEMENTS THEY HAD IN FORCE

SIZE OF STUDENT BODY	HAVE ANNUITY FUNDS	REPORTED ON ANNUITY FUNDS	NUMBER OF ANNUITY AGREEMENTS
Over 10,000.....	6	4	71
5,000—10,000.....	3	1	21
2,000—5,000.....	5	3	16
1,500—2,000.....	7	6	129
1,000—1,500.....	11	6	17
750—1,000.....	15	6	129
500—750.....	34	21	510
250—500.....	59	26	530
Under 250.....	13	9	315
Total.....	153	82	1,738
Median students.....	535	570	515

TABLE 8. LOCATION OF THE COLLEGES AND UNIVERSITIES THAT HAVE PRODUCTIVE FUNDS OF \$400,000 OR MORE AND WHO REPORTED NOT HAVING ANNUITY FUNDS, HAVING ANNUITY FUNDS, AND MAKING NO REPLY

SECTION*	NO ANNUITY FUNDS	HAVE ANNUITY FUNDS	NO REPLY	TOTAL
New England.....	7	11	9	27
Middle Atlantic.....	22	19	15	56
East North Central.....	14	45	11	70
West North Central.....	5	34	12	51
South Atlantic.....	14	19	7	40
East South Central.....	5	8	5	18
West South Central.....	6	4	4	14
Mountain.....	1	2	1	4
Pacific.....	3	11	2	16
Total.....	77	153	66	296

* The states are grouped according to the classification used by the United States Census Bureau.

the colleges and universities in the Middle Atlantic States do not write annuity agreements than any other section of the country. This table also indicates that over fifty per cent of the colleges and

universities that reported having funds subject to annuity are located in the North Central States while approximately forty per cent of the institutions having productive funds of \$400,000 or more are located in these states.

Table 9 indicates that the colleges and universities that write annuity agreements are largely located in the North Central States. This table also shows that as far as geographical distribution is concerned the group of colleges and universities that reported on the funds they had subject to annuity was fairly representative of the

TABLE 9. LOCATION OF COLLEGES AND UNIVERSITIES THAT REPORTED HAVING ANNUITY FUNDS AND OF THOSE INSTITUTIONS THAT STATED THE NUMBER OF ANNUITY AGREEMENTS THEY HAD IN FORCE IN 1931-1932

SECTION*	HAVE ANNUITY FUNDS	REPORTED ON ANNUITY FUNDS	NUMBER OF ANNUITY AGREEMENTS
New England.....	11	8	84
Middle Atlantic.....	19	11	99
East North Central.....	45	23	778
West North Central.....	34	16	599
South Atlantic.....	19	9	78
East South Central.....	8	5	7
West South Central.....	4	3	38
Mountain.....	2	1	1
Pacific.....	11	6	54
Total.....	153	82	1,738

* The states are grouped according to the classification used by the United States Census Bureau.

group of institutions that stated that they had annuity funds. An interesting fact to note is that almost eighty per cent of the annuity agreements are written by the colleges and universities located in the North Central States while less than fifty per cent of the institutions that submitted reports on their annuity funds are located in these states.

SUMMARY

One hundred and fifty-three colleges and universities reported having funds subject to annuity, and eighty-two of these institutions had a total of 1,738 annuity agreements in force in 1931-32. The total amount of funds subject to annuity reported by these eighty-two

institutions was \$16,291,360. The annual payments made to annuitants amounted to \$928,040, which means that the annuitants were paid an average rate of approximately 5.7%. There is evidence to believe that for some institutions the handling of annuity funds is a major problem and that for others the amount of funds subject to annuity is relatively insignificant when compared with the productive funds held by them.

On the whole the small colleges of the North Central States seem to write the major number of the annuity agreements. The eighty-two colleges and universities that reported the number and amount of their annuity funds seem to be a fairly representative sample of the one hundred and fifty-three institutions that stated that they had funds subject to annuity.

CHAPTER III

PRACTICES EMPLOYED BY COLLEGES AND UNIVERSITIES IN HANDLING ANNUITY AGREEMENTS

PROCEDURE

The practices which colleges and universities recognize in handling their annuity agreements was determined by an inquiry which was sent to a designated officer in each of the 153 institutions that stated that it had funds subject to annuity. This inquiry was sponsored by a Sub-Committee on Annuities of the National Committee on Standard Reports for Institutions of Higher Education.

Eighty-two colleges and universities responded to the inquiry of January 6, 1933, by submitting reports of their annuity funds. Seventy of these institutions sent in fairly complete reports while twelve stated little more than the number and type of annuity agreements in force and the amount of the funds subject to annuity.

PRACTICES RELATING TO THE ACCEPTANCE OF FUNDS SUBJECT TO ANNUITY

The diversity of conditions under which colleges and universities will accept funds subject to annuity is marked. An analysis of the following pages will reveal the practices of the institutions that cooperated in this study.

Bases for determining annuity rates.—Table 10 shows that there is a wide diversity in the practices of colleges and universities in respect to the bases for determining the rates they will pay annuitants.

The significant points to note in Table 10 are: first, two institutions use a mortality table to aid them in determining what annuity rate should be paid in any particular case. Second, approximately one-half of the institutions made no estimate of what per cent of the principal of the fund to be subject to annuity would become available to them for their use. Seventeen of the colleges and universities estimated that 100% of the principal of the annuity fund would remain intact. Three institutions seem to be writing annuity agreements with no hope or intention of benefiting directly from the practice. Third, nineteen institutions made no estimate as to what their

TABLE 10. BASES USED BY 70 COLLEGES AND UNIVERSITIES IN DETERMINING THEIR SCHEDULE OF ANNUITY RATES

BASES	NUMBER OF INSTITUTIONS
Bases for measuring mortality	
American Annuitants' Table.	1
McClintock Table of Mortality Among Annuitants.	1
Decimal Plan; i. e., 10% of age.	22
10% of age, plus 1%.	1
Schedule of Presbyterian Church.	2
Schedule of American Baptist Home Mission Society.	2
Institutional average.	1
Assume annuitant will live to age 85.	1
Each case treated separately.	39
Anticipated residuum	
No estimate.	36
100%.	17
95%.	1
80% to 90%.	1
75%.	3
70%.	3
60%.	1
50%.	4
15%.	1
0%.	3
Income assumed the principal of fund would earn	
No estimate.	19
8%.	1
7%.	1
6% or 7%.	1
6.7%.	1
6%.	19
5% to 6%.	2
5.75%.	1
5.5%.	4
5.25%.	2
5%.	12
4% to 5%.	1
4.5%.	2
4.25%.	1
4%.	1
3%.	1
0%.	1

annuity funds would earn when invested. Other estimates range all the way from nothing to eight per cent. The institution that did not expect to have its annuity funds earn an income had them invested in non-income producing college property.

Types of annuity funds accepted.—The present practices of seventy colleges and universities that have funds subject to annuity

with respect to the types of annuity funds that they will accept are clearly indicated in Table 11.

Seven institutions have no definite policy with respect to the types of annuity funds that they will accept. Two institutions that still have funds subject to annuity will no longer accept such funds, but will write living trust agreements instead.

TABLE 11. TYPES OF ANNUITY FUNDS ACCEPTED BY 70 COLLEGES AND UNIVERSITIES

TYPES OF ANNUITY FUNDS	NUMBER OF INSTITUTIONS
Undesignated funds.....	52
Funds for current use not restricted to specific purposes.....	31
Funds for current use restricted to specific purposes.....	24
Loan funds not restricted as to recipient or terms of loan.....	25
Loan funds restricted as to recipient or terms of loan.....	17
Endowment funds, the income of which is not restricted.....	52
Endowment funds, the income of which is restricted.....	38
Plant funds not restricted to specific purposes.....	30
Plant funds restricted to specific purposes.....	28
Any reasonable type.....	3
No definite policy.....	7
None.....	2

Types of assets acceptable.—The present practices of colleges and universities differ in several cases with what they were in the past. Three colleges of the twenty-eight that accepted improved real estate in consideration of an annuity agreement wrote with much feeling that they would never do so again. Two of the twelve institutions that accepted a piece of real estate with provision for the life tenancy of the annuitant will no longer do so. Table 12 shows the present practices of sixty-eight colleges and universities

TABLE 12. TYPES OF ASSETS 68 COLLEGES AND UNIVERSITIES WILL ACCEPT IN CONSIDERATION OF ANNUITY AGREEMENTS

TYPES OF ASSETS	NUMBER OF INSTITUTIONS
Acceptable assets limited to cash.....	23
Acceptable assets limited to cash and assets other than real estate.....	14
Acceptable assets include improved real estate.....	28
Acceptable assets include real estate with provision for life tenancy of annuitant.....	12
Acceptable assets include unimproved real estate.....	6

with respect to the types of assets they will accept when writing annuity agreements. Only twenty-three colleges and universities adhere to the conservative policy of accepting only cash in consideration of an annuity agreement.

The bases upon which assets other than cash or real estate will be accepted are revealed in Table 13.

TABLE 13. BASES UPON WHICH 14 COLLEGES AND UNIVERSITIES WILL ACCEPT ASSETS OTHER THAN CASH OR REAL ESTATE

BASES	NUMBER OF INSTITUTIONS
Appraised value.....	2
Appraised or market value.....	1
Market value.....	8
Par value.....	3

Thirty-one of the seventy colleges and universities that submitted reports regarding their annuity funds will accept real estate in consideration of an annuity agreement. Twenty-nine of these institutions accept real estate on the basis of its appraised or market value and two on an agreed value.

Terminology.—Colleges and universities use seven different terms for designating their annuity agreements. Some institutions

TABLE 14. THE TERMS USED BY 70 COLLEGES AND UNIVERSITIES IN DESIGNATING THEIR ANNUITY AGREEMENTS AND THE FINANCIAL RETURN RECEIVED BY THE ANNUITANT

TERM	NUMBER OF INSTITUTIONS
Annuity agreement.....	22
Annuity bond.....	33
Annuity contract.....	16
Conditional gift agreement.....	1
Income gift agreement.....	1
Life income contract.....	1
Special gift agreement with annuity return.....	1
No term for the agreement.....	5
Amount due you on annuity contract.....	1
Annuity.....	47
Annuity income.....	1
Annuity interest.....	2
Interest.....	18
No term for the financial return to annuitant.....	1

use more than one term. The financial return that the annuitant receives in consideration of the fund that is to be subject to annuity is designated in five different ways.

Restrictions written into annuity agreements.—On the whole colleges and universities are reluctant to write into their annuity agreements restrictions which will necessitate special methods of handling certain annuity agreements. Many institutions have formulated no policies with regard to any of the restrictions about which they were asked. Table 15 shows how seventy colleges and universities answered six questions in regard to restrictions sometimes incorporated in annuity agreements.

Five of the eleven institutions that write annuity agreements that call for the establishment of a definite amount upon the death of the annuitant make up the difference between the sum desired for the fund and the amount realized from the annuity agreement by adding enough from available current funds to make up the amount desired. Six other institutions achieve this same end by keeping the amount realized from the annuity agreement invested in suitable assets and permitting the income to accrue until the fund has reached the specified amount.

TABLE 15. HOW 70 COLLEGES AND UNIVERSITIES REPLIED TO SIX QUESTIONS REGARDING RESTRICTIONS SOMETIMES WRITTEN INTO ANNUITY AGREEMENTS

QUESTION	ANSWER			No REPLY
	<i>Would</i>	<i>Yes</i>	<i>No</i>	
1. Do you write annuity agreements that restrict the investment of the fund to specific types of assets?.....		10	51	9
2. Do you write annuity agreements that restrict the investment of the fund to specific assets within the type?.....		6	52	12
3. Do you write annuity agreements that restrict you to separate investment of the assets of the annuity fund?.....	2	11	50	7
4. Do you write annuity agreements that restrict you as to your methods of accounting for the funds?.....	1	5	54	10
5. Do you write annuity agreements that call for the establishment of a fund of a definite amount upon the death of the annuitant?....	2	11	48	9
6. Do you write annuity agreements that specify that the net proceeds of the original gift at the time of the death of the annuitant shall constitute the amount of the fund?.....	2	23	33	12

CLASSIFICATION AND MANAGEMENT OF FUNDS
SUBJECT TO ANNUITY

Classification of annuity funds.—Twenty-eight of the seventy colleges and universities that have funds subject to annuity keep their annuity funds separate and distinct from all other funds, while thirty-seven institutions group their annuity funds with their endowment funds. Two institutions group all or part of their annuity funds with like classes of funds which are not subject to annuity; for example, one college groups its annuity funds that are designated for student loans with the student loan funds that are not subject to annuity. One institution has all of its annuity funds grouped with plant funds. Another institution groups its annuity funds with its living trust funds. One college keeps part of its annuity funds separate and part grouped with other funds.

Classification of annuity fund assets.—Forty-seven out of seventy colleges and universities do *not* keep their annuity fund *assets* separate and distinct from the assets of all other funds. Of these forty-seven institutions one does keep the real estate that it accepts in consideration of its annuity agreements separate and distinct from the assets of all other funds. Another institution does the same with the securities that it accepts when writing annuity agreements. Twenty-three of the seventy colleges and universities do keep their annuity fund assets separate and distinct from the assets of all other funds.

Of the forty-seven colleges and universities that do *not* keep their annuity fund *assets* separate and distinct from the assets of all other funds, four institutions merge the assets of each class of annuity funds with the assets of funds of similar designation that are not subject to annuity. One institution varies its policy from fund to fund, while another groups its annuity fund assets with the assets of its living trusts. Forty-one institutions merge their annuity fund assets with their endowment fund assets; two of these forty-one institutions make exceptions in the cases of the real estate and securities that are accepted in consideration of their annuity agreements and keep these special assets separate.

The twenty-three colleges and universities that keep their annuity fund assets separate and distinct from the assets of all other funds do not agree in their investment policies. Fourteen institutions merge all of their annuity fund assets for investment purposes;

one institution invests the assets of each annuity fund separately; four institutions have a separate investment group for each class of annuity funds; three others merge the assets of annuity funds designated for general purposes and keep a separate investment account for each annuity fund that is designated for a specific purpose; and one college has all of its annuity fund assets "tied up in dormitories."

Management of annuity funds and annuity fund assets.—The investment policies of the sixty-six colleges and universities reporting (four did not report their investment policies) vary tremendously. A few institutions have all of their annuity funds invested in real estate, while real estate mortgages are the only investments considered by others. One institution specifically mentioned that its annuity funds were invested in farms and farm mortgages.

Table 16 indicates the type of assets in which annuity funds are invested. It should be noted that although thirty-one colleges and universities accept real estate in consideration of annuity agreements only sixteen institutions reported that they invested annuity funds in real estate. This seeming discrepancy is accounted for by the fact that real estate accepted from the donor or annuitant is not always included in the table.

TABLE 16. THE TYPE OF ASSETS IN WHICH 66 COLLEGES AND UNIVERSITIES INVEST THEIR ANNUITY FUNDS

TYPE OF ASSETS	NUMBER OF INSTITUTIONS
Productive institutional property	14
Unproductive institutional property	2
Foreign bonds	13
Government bonds (U. S.)	28
State and municipal bonds	22
Industrial bonds	33
Public utility bonds	38
Railroad bonds	32
Real estate mortgages	56
Preferred stocks	14
Common stocks	12
Real estate	16
Demand notes	1
Student Rotary Loan Fund, notes bearing 6% interest	1

When real estate is accepted in consideration of an annuity agreement, twenty-five colleges and universities make up the excess of annuity payments over income from available institutional funds

other than annuity funds. On the whole this practice does not entail a very great drain on the current funds because of the limited amount paid the annuitant, but in some instances the amount of the current funds expended in order to make the necessary annuity payments is appreciable. Four institutions make up the difference between the income from the real estate and the annuity payments by drawing on the principal of other annuity funds. One institution employs both of the procedures just mentioned. Only one institution has a reserve fund especially created to take care of such contingencies.

When the income from assets (other than real estate) of an annuity fund is insufficient to pay the annuities, forty-four institutions draw upon other available institutional funds. In some cases this drain on current income is negligible and in others it is an appreciable amount and cause for alarm. Fourteen institutions draw upon the principal of the annuity fund. Two colleges follow both of the practices just described. Nine institutions did not indicate what policy they would or did pursue. It is of interest to note here that in sixteen institutions the income from the funds subject to annuity exceeds the annuity payments.

Only seven out of seventy colleges and universities use any portion of the principal of an annuity fund designated for a specific purpose prior to the death of the annuitant for purposes other than paying annuities when the annuities exceed the income. Three of these eight indicated that they follow this practice only if the annuity agreement so provides.

In the majority of cases the administrative and promotional expenses of the annuity agreements are negligible. This reason probably accounts for the fact that only two institutions charge their annuity funds with the promotional and administrative expenses incident to annuities. One institution charges its annuity funds with the promotional expenses only; another states that it has no promotional expenses, but it does charge the annuity funds with the cost of administering them.

Because in only a limited number of cases does the income from an annuity fund exceed the annuity, the majority of the colleges and universities indicated what their policy would be rather than what they do. Eight institutions indicated that they would add the excess income to the principal of the annuity fund. Forty-six institutions would credit the excess income to the current expense fund. Two colleges would employ both of the methods just mentioned. Four

institutions put the excess income into an "Annuity Reserve Account," and three others hold the excess income in an "Annuity Interest" or "Income Account." Seven institutions neglected to state what their policy would be.

Only fourteen colleges and universities have periodic reserve valuations made by competent outside authorities; nine have these reserve valuations made annually; two semi-annually; and one irregularly. Two institutions did not mention how frequently their reserve valuations were made.

RE-INSURANCE

Not one of the colleges and universities that reported having funds subject to annuity re-insures any of its annuitants with an old line life insurance company.

ACCOUNTING FOR ANNUITY FUNDS

Colleges and universities follow a variety of practices in accounting for their annuity funds. Table 17 gives a picture of the methods employed by the seventy institutions studied.

TABLE 17. THE PRACTICES EMPLOYED BY 70 COLLEGES AND UNIVERSITIES IN ACCOUNTING FOR THEIR ANNUITY FUNDS

PRACTICES	NUMBER OF INSTITUTIONS
1. The accounts for the various types of annuity funds are grouped in a separate section and kept separate and distinct from accounts for all other funds.	35
2. Accounts for the various types of annuity funds are grouped with the accounts for:	
a. Current funds.	4
b. Loan funds.	2
c. Endowment and other non-expendable funds.	28
d. Plant funds.	5
e. Living trusts.	1
f. "Sundry Special Income Accounts".	1
3. The accounts for annuity funds are kept separate and distinct from accounts for other funds but are grouped according to their ultimate designations.	25
4. A separate account is kept for the residuum (corpus) of each annuity fund.	18
5. One account is kept for the residua of undesignated annuity funds and a separate account for the residuum of each designated annuity fund.	7
6. The accounts reflect which annuity funds are invested separately and which are pooled for investment purposes.	27

ACCOUNTING FOR ANNUITY FUND ASSETS

The practices followed in accounting for annuity fund *assets* are reflected in Table 18. This table shows that only twenty-nine colleges and universities out of the seventy institutions submitting reports on their annuity funds keep their accounts for annuity fund assets separate and distinct from the accounts for other assets. Six institutions did not state what their methods of accounting for their annuity fund assets were. The accounts for the annuity fund assets of only twenty-seven colleges and universities indicate which annuity fund assets are pooled and which are separately invested. The accounts for the assets of the annuity funds of twenty-seven other institutions do not indicate which annuity fund assets are pooled and which are not. Sixteen institutions did not state whether their accounts for the assets of the annuity funds reflected which annuity fund assets were pooled and which were not.

TABLE 18. HOW 70 COLLEGES AND UNIVERSITIES REPLIED TO TWO QUESTIONS REGARDING THEIR ACCOUNTS FOR ANNUITY FUND ASSETS

QUESTION	ANSWER		
	<i>Yes</i>	<i>No</i>	<i>No Reply</i>
1. Are your accounts for annuity fund assets kept separate and distinct from the accounts for other assets?	29	35	6
2. Do your accounts for annuity fund assets indicate which annuity fund assets are pooled and which are separately invested?	27	27	16

ACCOUNTING FOR RECEIPTS AND EXPENDITURES

The accounts for receipts and expenditures incident to the funds subject to annuity of thirty-seven out of seventy colleges and universities are kept separate and distinct from other accounts for receipts and expenditures.

Table 19 shows how seventy colleges and universities classify the receipts and expenditures for annuity funds.

It should be noted that because of the very limited number of annuity agreements the majority of colleges and universities have in force the number of replies to the questions asked regarding the receipts and expenditures of annuity funds is small.

TABLE 19. HOW 70 COLLEGES AND UNIVERSITIES HANDLE THE RECEIPTS AND EXPENDITURES INCIDENT TO ANNUITY FUNDS

METHODS USED	NUMBER OF INSTITUTIONS
1. How do you classify the income from annuity funds?	
a. The income is credited to each annuity fund.....	13
b. Only one income account is used with no subsidiary accounts.....	40
c. A control account, or accounts, is used with appropriate subsidiary accounts.....	7
d. Income is credited to 3 different accounts.....	1
2. How are your subsidiary annuity fund accounts of income classified?	
a. We do not classify them.....	28
b. By individual annuity agreement.....	11
c. By a combination of individual funds.....	
d. By a combination of groups of funds.....	2
3. How do you classify your annuity fund expenditures?	
a. Expenditures are charged to the annuity funds.....	17
b. One account is used with no subsidiary accounts.....	29
c. A control account, or accounts, is used with appropriate subsidiary accounts.....	9
4. How do you classify your subsidiary accounts of annuity fund expenditures?	
a. We do not classify them.....	24
b. By individual annuity agreements.....	10
c. By a combination of individual funds.....	2
d. By a combination of groups of annuity funds.....	2
5. How do you credit or charge the income and expenditures to the annuity funds?	
a. Income and expenditures are credited and charged to the annuity fund.....	18
b. Income and expenditures are classified at the close of the year, or periodically during the year, and adjusted with the fund.....	17
c. There is a separate account with certain specified annuity agreement residua.....	3
d. There is an account with each annuity agreement residuum to which the income and expenditures are charged.....	4
e. Other methods.....	5

REPORTING FUNDS SUBJECT TO ANNUITY

All but nine out of seventy colleges and universities make periodic reports on funds subject to annuity. The items that are included in these reports are indicated in Table 20.

Table 20 shows a wide variation in the items of information reported. If all of the items listed in the table are essential to a full understanding of the facts regarding annuity agreements, then it becomes apparent that the reports submitted would seem to be inadequate.

Table 21 shows to whom reports on funds subject to annuity are made. Three of the sixty-one institutions that stated that they made such reports did not indicate to whom they were made.

TABLE 20. THE ITEMS 61 COLLEGES AND UNIVERSITIES INCLUDE IN THEIR REPORTS OF FUNDS SUBJECT TO ANNUITY

ITEMS	NUMBER OF INSTITUTIONS
1. Amount of funds subject to annuity.....	60
a. At book value.....	54
b. At the determined net value to the institution.....	6
2. Assets held to account of funds subject to annuity.....	37
a. With book value indicated.....	34
b. With par value indicated.....	8
c. With market value indicated.....	5
3. Funds subject to annuity received during current year.....	43
4. Income from investments.....	35
5. Annuities paid during fiscal year.....	45
6. Administrative expenses incident to annuities.....	
7. Promotional expenses incident to annuities.....	
8. Gain or loss from mortality under annuities.....	10
9. Gain or loss on sale or maturity of assets.....	11
a. Real estate only.....	1
10. Estimated actuarial liability on account of funds subject to annuity.....	1
11. Reserve held to account of funds subject to annuity.....	7
12. Surplus.....	4
13. Deficit.....	1

TABLE 21. SHOWS TO WHOM 58 COLLEGES AND UNIVERSITIES MAKE THEIR REPORTS ON FUNDS SUBJECT TO ANNUITY

TO WHOM REPORTS ARE MADE	NUMBER OF INSTITUTIONS
1. Annuitants.....	2
2. Administration and Board of Trustees.....	58
3. Church Board.....	1
4. State Insurance Department.....	1

SUMMARY

In this chapter the practices recognized by seventy colleges and universities were revealed in regard to the acceptance of funds subject to annuity, the classification and management of funds subject to annuity, and the accounting for and reporting of funds subject to annuity.

CHAPTER IV

RISKS INCIDENT TO THE WRITING OF ANNUITY AGREEMENTS

INTRODUCTION

The effectiveness of annuity agreements as means of securing funds for colleges and universities may be measured in terms of the amounts remaining for institutional use at the death of the annuitants. The essence of annuity agreements is assumption of risks. If annuity agreements are to be effective in securing additions to funds for institutional use, it is necessary that the nature of the risks assumed be understood, and limited to the point where a net addition to institutional funds becomes a reasonable expectancy.

These risks may be grouped under three headings: (1) the longevity of annuitants, (2) the risk of realizing returns from invested net reserves below the rates contemplated in the writing of the agreements, and (3) the risk of loss of net reserves due to the hazards attending investment and realization. Only the first of these risks is peculiar to the various phases of life insurance. It is the purpose of this chapter to describe the risks which institutions may assume in the writing of annuity agreements.

LONGEVITY OF ANNUITANTS

The annuity agreement assumes the risk of longevity of the annuitant when it undertakes to pay to the annuitant a stated sum at regular intervals as long as he lives. If the annuitant dies before he reaches the age at which the institution has assumed that death would occur, the amount paid to the annuitant would be less than originally contemplated by the institution, and the mortality experience may thus be said to have been favorable. If on the other hand the annuitant lives longer than anticipated by the institution, the annuity payments would be greater than contemplated at the time of writing the agreement, and the mortality experience may thus be said to have been unfavorable to the institution.

Inasmuch as the annuity agreement provides for periodic payments of fixed sums to the annuitant the only way in which the required payments on such an agreement may be estimated is to

estimate for purposes of the agreement, the length of life of the annuitant. It is therefore appropriate to examine the methods in use to estimate length of life of annuitants, and to consider what methods may be advantageously employed by colleges and universities.

"The probability of living, or of dying, at a given age is measured by a *mortality table*. The fundamental column in a mortality table exhibits the number of people left alive at each age out of an assumed number alive at a given early age until all are dead."¹ The McClintock Table of Mortality Among Annuitants was constructed in 1899 by Emory McClintock on annuities issued up to 1894 by fifteen American life insurance companies. This mortality table has been adopted as the standard for the valuation of annuity contracts in many states, but "it does not fit the experience that could be reasonably expected at the present time."²

In 1920 the American Annuitants' Table, as compiled by Arthur Hunter from data contributed by twenty-five American and six Canadian life insurance companies, was published.³ This table covers the experience on 22,243 annuity contracts issued on 14,868 lives. The mortality rates among male lives and female lives were derived separately.

The Combined Annuity Table is based upon the experience among lives covered by policies of group insurance, graded at the older ages into the experience among the lives of annuitants as measured by Hunter's American Annuitants' Table. This table has been adopted by the State of New York as a minimum standard for valuing annuities issued on and after January 1, 1931.⁴

An "Expectation" Table, constructed from Hunter's American Annuitants' Select Table of Mortality, is shown as Table 22. This "Expectation" Table covers the years from fifty to ninety for both male and female annuitants and shows the average number of years annuitants of a given age live.

The mortality of males and females is not alike as mortality tables indicate, so allowance must be made for the sex of annuitants when considering the risks of longevity.

¹ Dowling, Wayland. *Mathematics of Life Insurance*, McGraw-Hill Book Co., New York, 1925, p. 27.

² *Eastern Underwriter*, Vol. 31, No. 6, January 10, 1930.

³ *Transactions of the Actuarial Society of America*, Vol. XXV, Part I, May, 1920, pp. 157-177.

⁴ *Op. cit.*

TABLE 22. AN "EXPECTATION" TABLE CONSTRUCTED FROM HUNTER'S AMERICAN ANNUITANTS' SELECT TABLE OF MORTALITY

YEARS OLD	EXPECTATION IN YEARS		YEARS OLD	EXPECTATION IN YEARS	
	<i>Male</i>	<i>Female</i>		<i>Male</i>	<i>Female</i>
50	22.35	25.03	70	10.38	12.23
51	21.64	24.30	71	9.92	11.71
52	20.95	23.57	72	9.47	11.21
53	20.26	22.85	73	9.03	10.72
54	19.58	22.14	74	8.62	10.25
55	18.92	21.43	75	8.21	9.79
56	18.26	20.75	76	7.82	9.35
57	17.62	20.07	77	7.45	8.92
58	16.99	19.40	78	7.08	8.51
59	16.36	18.74	79	6.73	8.11
60	15.76	18.08	80	6.40	7.72
61	15.16	17.44	81	6.08	7.35
62	14.57	16.81	82	5.77	6.99
63	14.00	16.20	83	5.48	6.64
64	13.44	15.59	84	5.19	6.31
65	12.90	15.00	85	4.93	5.99
66	12.37	14.42	86	4.66	5.69
67	11.85	13.85	87	4.42	5.40
68	11.34	13.29	88	4.18	5.12
69	10.85	12.75	89	3.96	4.85
			90	3.74	4.59

The foregoing indicates that for individuals of any given age, the expectation of life is brief for some, and gradually extends until it reaches the maximum for others. It will thus be seen that while prediction may be made with some degree of accuracy for a large group, such prediction may not be applied to the individual case. There is no way of definitely ascertaining whether the few annuity agreements that any college or university may write may not be on the lives of annuitants who will live until they have reached an age that approaches the maximum. An analysis of Table 23 will reveal that it is not impossible for the few annuitants of any one institution to live to the age of ninety or even one hundred. There is also the possibility, of course, of each of the nine or ten annuitants of any one institution to die at an early age.

Life insurance companies have written large numbers of annuity contracts on the basis that the entire principal of the funds to be subject to annuity together with the income from the net reserves will be consumed in the administration of the fund and in the payment of annuities. The experience of forty-one life insurance companies doing business in the State of New York will be given in so

TABLE 23. HUNTER'S AMERICAN ANNUITANTS' TABLE*

AGE	NUMBER LIVING	
	Male	Female
50	82,140	84,376
55	76,161	79,459
60	68,518	73,177
65	58,919	65,179
70	47,353	55,225
75	34,398	43,420
80	21,478	30,526
85	10,694	18,153
90	3,795	8,404
95	811	2,675
100	81	486
105	1	22
106		5

*Adapted from American Annuitants' Table, *Transactions of the Actuarial Society of America*, Vol. XXVIII, Part II, October, 1927, pp. 363-4, 373-4.

far as it pertains to their annuity contracts, for in this way some conception of the risks involved in measuring the mortality of annuitants will be gained. In somewhat more detail the experience of the ten leading life insurance companies in the annuity business will be analyzed.

The amount gained or lost from mortality under annuities by life insurance companies will serve to give a fairly adequate picture of the success or failure realized in the prediction of the length of the lives of annuitants if we assume that the amount of income actually earned on the funds subject to annuity equals the rate that was assumed that the net reserves of the annuity fund would earn when the schedule of annuity rates was devised and that there were no losses from investments.

Table 24 shows that on the whole the experience of the forty-one life insurance companies for the years indicated has been an unhappy one as far as mortality is concerned. It must be noted, however, that the data given in these tables may not necessarily reflect the ultimate experience regarding the gain or loss from mortality due to the short length of time covered by the table. Moreover the variation in amounts subject to annuity may account in part for the losses sustained. The significant fact for our purpose is that the total number of agreements is still too small to make possible an accurate prediction of results.

TABLE 24. NUMBER OF ANNUITY CONTRACTS, AMOUNT PAID IN ANNUITIES, AND THE GAIN OR LOSS FROM MORTALITY FOR THE 41 LIFE INSURANCE COMPANIES DOING BUSINESS IN THE STATE OF NEW YORK IN 1928-31, INCLUSIVE.*

YEAR	NUMBER OF CONTRACTS	AMOUNT PAID IN ANNUITIES	AGGREGATE LOSS FROM MORTALITY
1928	118,999	\$ 80,996,289	\$2,272,333
1929	138,242	99,042,942	1,823,580
1930	162,361	118,280,613	663,140
1931	203,897	149,049,692	485,396

* *New York Insurance Reports*—Part II, Life Insurance, Vols. 1929-1932, inclusive.

As Table 24 shows the aggregate experience of 41 life insurance companies, the following tables, numbers 25 and 26, show respectively the number of contracts in force and the gain or loss from mortality only in each of ten leading life insurance companies for the years 1928 to 1931 inclusive.

It is a significant fact that each of these life insurance com-

TABLE 25. NUMBER OF ANNUITY CONTRACTS EACH OF TEN LIFE INSURANCE COMPANIES HAD IN FORCE DURING 1928-1931, INCLUSIVE*

COMPANY	YEAR			
	1928	1929	1930	1931
Equitable Life.....	56,796	67,822	82,702	107,999
Metropolitan Life†.....	1,793	1,938	2,498	2,710
Mutual Life.....	8,748	8,858	9,210	11,632
New York Life.....	8,848	10,609	12,390	15,596
Teachers Insurance.....	6,956	8,132	9,127	10,276
Ætna Life.....	2,790	2,914	3,042	3,312
Penn Mutual.....	5,643	6,521	8,161	14,054
Phoenix Mutual.....	4,301	5,041	5,854	6,693
Provident Mutual.....	2,183	2,537	2,973	3,721
Prudential Life‡.....	6,041	7,516	9,070	4,961

* *New York Insurance Reports*—Part II, Life Insurance, Vols. 1929-1932, inclusive.

† Includes 50 group annuities covering 39,598 certificates, 1928
 " 93 " " " 66,846 " 1929
 " 134 " " " 81,541 " 1930
 " 158 " " " 115,404 " 1931

‡ Includes 1 group annuities covering 254 certificates, 1928
 " 4 " " " 781 " 1929
 " 5 " " " 1,368 " 1930
 " 7 " " " 6,754 " 1931

panies writes more annuity contracts than all of the colleges and universities put together, yet in each case the number was too small to prevent a considerable fluctuation in mortality.

TABLE 26. THE GAIN OR LOSS FROM MORTALITY UNDER ANNUITIES OF TEN LIFE INSURANCE COMPANIES DOING BUSINESS IN THE STATE OF NEW YORK FOR THE YEARS 1928-1931, INCLUSIVE*

COMPANY	YEAR			
	1928	1929	1930	1931
Equitable Life.....	—\$635,773	—\$367,646	—\$115,381	—\$951,944
Metropolitan Life.....	44,437	—291,087	48,331	959,249
Mutual Life.....	238,013	226,775	595,456	—52,158
New York Life.....	—73,376	—298,017	—421,537	111,624
Teachers Insurance.....	—8,684	24,851	21,200	—50,005
Ætna Life.....	—222,090	28,858	—57,907	—303,863
Penn Mutual.....	—221,421	—325,593	199,026	65,397
Phoenix Mutual.....	—326,936	—145,556	—279,449	—174,566
Provident Mutual.....	3,719	—20,939	—22,196	26,509
Prudential Life.....	—125,741	—144,938	—94,556	89,095

* *New York Insurance Reports*—Part II, Life Insurance, Vols. 1929 to 1932, inclusive.

As shown in Chapter II, the number of annuity agreements in force in 82 colleges and universities total 1,738. Only 8 institutions have more than 46 agreements, while the remaining 74 have from 1 to 45 agreements. The median over-all is 9. The foregoing discussion makes evident that the risk of longevity is predictable only where large numbers are involved, and evidence of the experience of life insurance companies who write thousands of contracts shows that they deal in numbers as yet too small to avoid considerable variation between the actual dates of deaths of annuitants from the dates assumed in the annuity contracts.

Since the nature of this risk is such as to make prediction of death impracticable except when large numbers are involved, the college or university writing few agreements should not predict on the basis of average experience. Each risk should therefore be considered on an individual basis, and the conservative point of view suggests that a long life be assumed for purposes of the agreement.

When prediction is based on mortality tables, and applied to sufficient numbers, the financial results may be anticipated only when there is some degree of uniformity in the size of funds accepted, in

order that the compensating variations of the actual dates of death from predicted dates may have a corresponding effect in terms of dollars. One large annuity fund may cause an institution considerable embarrassment if not a loss if the annuitant should live for any considerable length of time beyond his expectancy. Life insurance companies will not write an annuity contract for any large amount that approaches one million dollars without reinsuring this annuitant for a part of this amount with one or more other companies. In this way they distribute the risk so that an annuitant that lives an extra long life will not be too great a burden on any one company. To the degree that the college bases the annuity agreement upon a length of life which approaches the maximum estimated length, to that degree the variation in size of funds accepted subject to annuity becomes less significant.

INCOME FROM NET RESERVES

The amount which remains for the benefit of the institution at the death of the annuitant is determined not only by the length of life of the annuitant but is in part determined by the income realized from the net reserve of the fund. In writing the annuity agreement, it is necessary that a rate of income from reserves be assumed, if an estimate is to be made of the sum which may become available at the death of the annuitant.

Among the factors which operate to cause variations in the income to be realized are (1) the purchase price of the assets, (2) loss of income due to the reduction of dividends or inability of debtors to pay.

The purchase price of assets represents a reflection of economic conditions and of the intrinsic worth of the assets. Moreover the nature of the assets required will affect the incomes. That is to say, that if the college has agreed to pay an annuity in excess of the income which may be realized, a portion of the net reserve will be consumed during the life of the agreement, and it is essential that such portion of the reserve be maintained in assets of high degree of marketability and of high stability of market value.

An analysis of various tables showing the yields on stocks and bonds reveals that the yield does not vary to any great extent during so-called normal periods but that during an economic depression the yield fluctuates considerably. That the possibilities of income vary with the investment market is indicated by a comparison of the charts

showing the yields on stocks and bonds with those showing the market prices of stocks and bonds.

Table 27 shows the dividend yields on the American preferred stocks that are listed on the New York Stock Exchange. These dividend yields are "based on 20 high grade industrial stocks. The yield is calculated weekly from average prices and the average of weekly yields for each month is used."⁵

Table 28 shows the yield on American bonds. These yields are "based on 60 Bonds (15 Municipals, 15 Industrials, 15 Railroads and

TABLE 27. DIVIDEND YIELDS ON LISTED AMERICAN PREFERRED STOCKS*

DATE	YIELD IN %
January, 1925.....	5.96
January, 1926.....	5.83
January, 1927.....	5.65
January, 1928.....	5.33
January, 1929.....	5.42
January, 1930.....	5.53
January, 1931.....	5.66
January, 1932.....	6.85
January, 1933.....	7.17

* Based on 20 high grade Industrial Stocks. The yield is calculated weekly from average prices and the average of weekly yields for each month is used.

Source: Standard Statistics Co., Inc., of New York.

TABLE 28. YIELDS ON AMERICAN BONDS*

DATE	INDUS- TRIALS	RAIL- ROADS	UTILITIES	MUNI- CIPALS	ALL
January, 1925.....	5.14%	4.73%	5.14%	4.10%	4.78%
January, 1926.....	4.95	4.59	4.99	4.10	4.66
January, 1927.....	4.87	4.42	4.81	4.04	4.54
January, 1928.....	4.76	4.18	4.68	3.89	4.38
January, 1929.....	4.96	4.50	4.79	4.16	4.60
January, 1930.....	5.04	4.51	4.79	4.22	4.64
January, 1931.....	4.99	4.25	4.56	3.92	4.43
January, 1932.....	7.11	5.70	5.36	4.92	5.77
January, 1933.....	7.29	5.91	4.91	4.23	5.59

* Based on 60 Bonds (15 Municipals, 15 Railroads, 15 Public Utilities, and 15 Industrials); based on the arithmetic average of yields to maturity and on Wednesday's weekly closing prices: the average of weekly yields for each month is used.

Source: Standard Statistics Co., Inc., of New York.

⁵ *New York Stock Exchange Bulletin*, Vol. IV, No. 3, March, 1933, p. 52.

15 Public Utilities); based on the arithmetic average of yields to maturity and on Wednesday's weekly closing prices; the average of weekly yields for each month is used."⁶

The yield on real estate mortgages has suffered considerably the past few years, and in many cases insurance companies and other holders of real estate mortgages have become unwilling owners of farms and city property. Not only has the yield on mortgages suffered interruptions, but in many cases real estate thrust upon the mortgagor has become a source of expense.

Wherever institutions have had capable financial officers, they have been able to secure a fairly stable yield on their net reserves as Table 29 indicates. The Spectator Company is in the habit of publishing annually in its *Year Book* the rate of interest earned on mean invested funds of a limited number of life insurance companies. Table 22 gives the net rate earned on the assets of ten life insurance companies for the years 1926-1930 inclusive.

TABLE 29. NET RATE OF INTEREST EARNED ON MEAN INVESTED FUNDS OF TEN LIFE INSURANCE COMPANIES*

COMPANY	1926	1927	1928	1929	1930
Equitable Life.....	5.0 %	4.9 %	5.0 %	5.0 %	5.2 %
Metropolitan Life.....	5.4	5.3	5.3	5.2	5.2
Mutual Life.....	4.6	4.6	4.7	4.8	4.8
New York Life.....	4.9	4.8	4.7	4.8	4.8
Teachers Insurance.....	5.7	5.6	5.4	5.4	5.4
Ætna Life.....	4.6	4.7	4.8	4.3	4.4
Penn Mutual Life.....	5.4	5.2	5.2	5.2	5.1
Phoenix Mutual.....	5.0	5.0	4.9	4.9	4.9
Provident Mutual.....	5.0	5.0	4.9	4.9	4.9
Prudential Life.....	5.0	4.9	5.0	5.0	5.0

* *Year Book* of The Spectator Company, New York.

There are chances of a fluctuating yield from investments which may be reduced to a minimum by competent financial officers who have the time and ability to watch the investment market closely and to discern approaching economic changes in order to assure their institutions a sure and steady income on its invested funds.

What the trend in interest rates will be during the years to come, no one can predict with any degree of certainty; but evidence has been presented which shows that it may fluctuate from year to year.

⁶ *Ibid.*, p. 52.

INVESTMENT OF NET RESERVES

The annuity agreements contemplate return from net reserves. This implies the need of investment. Ordinarily an institution will invest its receipts promptly unless there is a rapid downward trend in market values such as may occur during a crisis. When an institution has invested its funds in what it considers desirable assets, there is no certainty that these assets will always remain suitable to the purpose; the assets need constant watching. Among the risks of investment are those which are due to changes in the economic conditions of a country or the world which result in fluctuations in the market value of assets. Second, there are also risks which come from the inability to carry on a sound long term investment policy that provides for an adequate diversification of the assets. Third, risks are increased when an institution's funds are so limited that it cannot employ competent supervision of its assets. Fourth, if an institution permits restrictions to be placed upon its assets by annuitants, its investment program may suffer.

There is ample evidence to show that there are fluctuations in the market value of assets which involve risks to the owner. Figure 1 shows the stock price index and monthly averages of all listed shares on the New York Stock Exchange.

Figure 2 shows the average prices of all listed bonds in dollars. Even the United States Government bonds which are considered the safest type of assets fluctuate in market value.

Little need be said about the fluctuation in the value of real estate or real estate mortgages, for recent daily newspapers have been full of accounts of foreclosures on real estate and of moratoriums on farm mortgages.

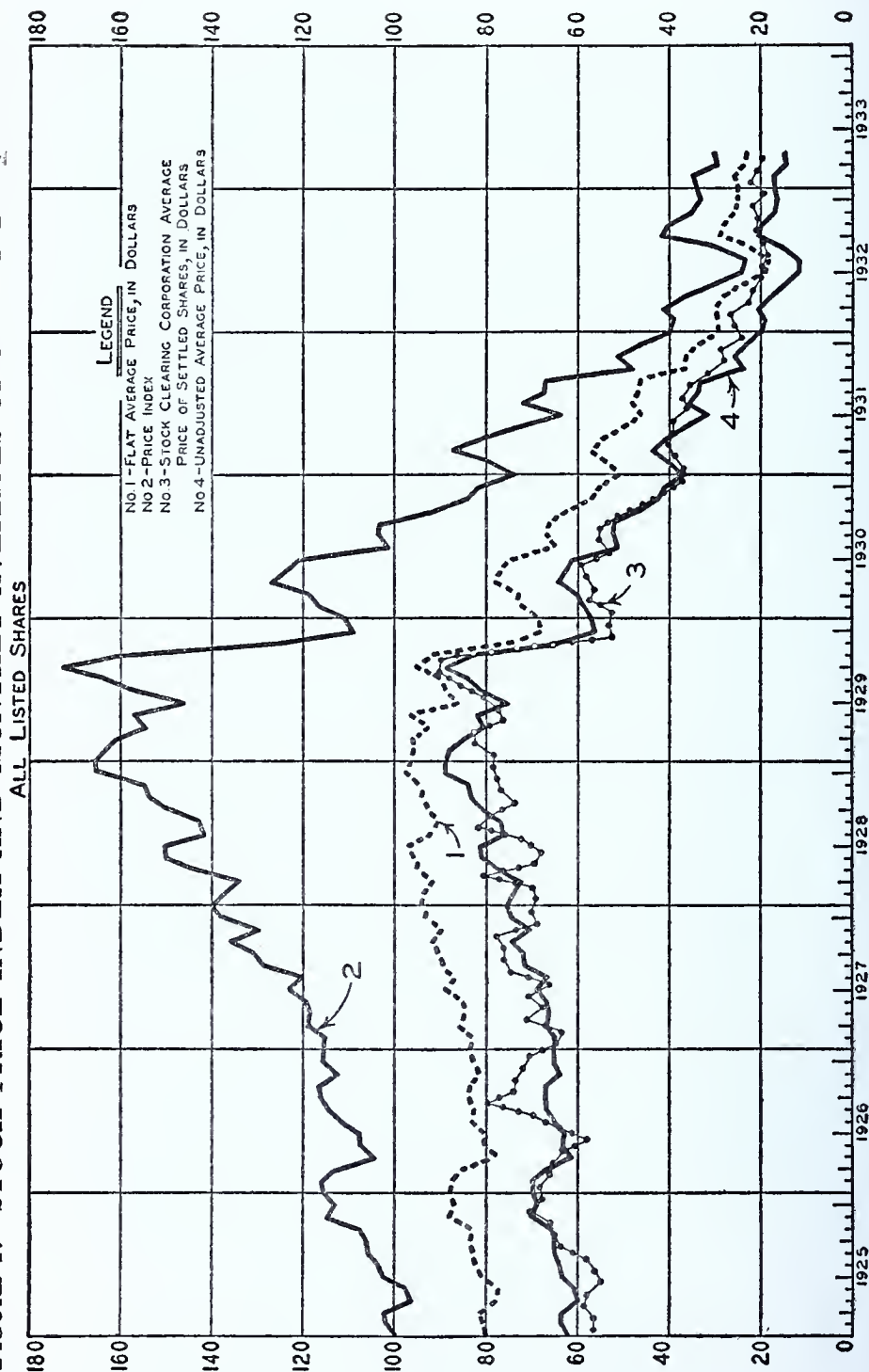
Agitation⁷ for the writing off of a given per cent of each real estate mortgage in order to prevent almost total losses to banks and insurance companies has resulted in action by the federal government. Even though such action may have been necessary and desirable, it emphasizes the fact that losses have been incurred in the investment in real estate mortgages which were not foreseen.

The magazine *Time* carries the following note:

"The Administration put up to Congress its measure for (1) writing down interest on farm mortgages to 4½%, thereby relieving the farmer, and (2) for a Federal guarantee of the interest on a

⁷ *Eastern Underwriter*, March 24, 1933, p. 3.

FIGURE 1. STOCK PRICE INDEX AND MONTHLY AVERAGES OF ALL LISTED SHARES*



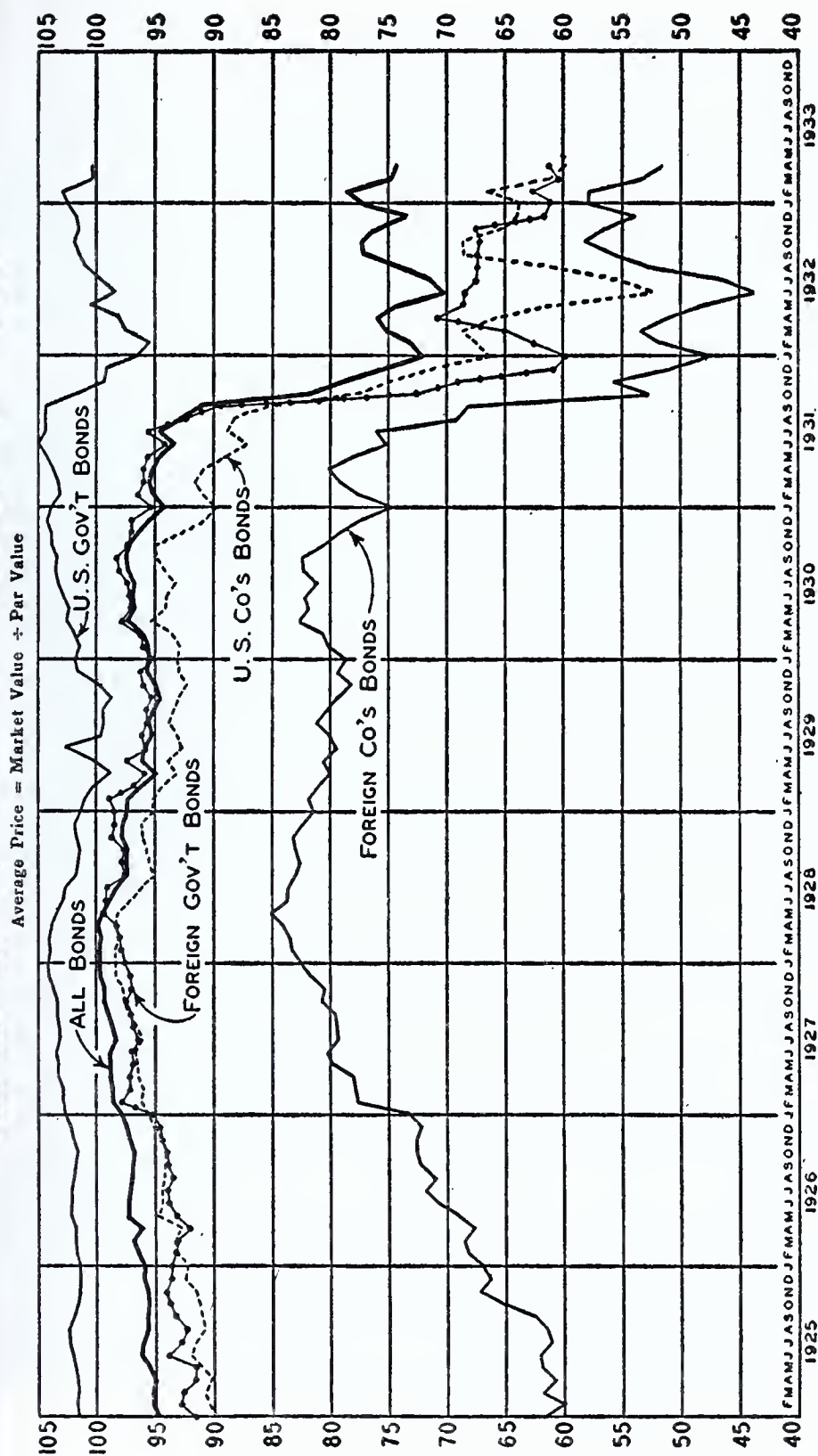
No. 1. Flat Average Price (the average of all prices) in dollars.

No. 2. Price Index (January 1, 1925=100) based on the adjusted average price, which is the average price (No. 4) adjusted for split-ups, stock dividends, etc.

No. 3. Stock Clearing Corp. monthly average price of settled shares, in dollars.

No. 4. Unadjusted Average Price found by dividing the total market value by the total number of shares listed, in dollars. Nos. 1, 2 and 4 are based on first of month figures.

FIGURE 2. AVERAGE MONTHLY PRICES OF ALL LISTED BONDS IN DOLLARS *



* New York Stock Exchange Bulletin, Vol. IV, No. 4, April, 1933, p. 67.

\$2,000,000,000 issue of Federal Land Bank bonds to be exchanged for mortgages, thereby relieving insurance companies, banks and others who have lent the farmer some eight and one-half billion dollars.”⁸

The foregoing paragraphs describe the risks incident to the investment of net reserves. It is to be emphasized that the large life insurance company which has a steady flow of income through new business or through payments of premiums on contracts already written has had growing reserves, and could with some degree of assurance invest in assets from the long term point of view.

Unless an institution that writes annuity contracts has a steady flow of income through new business or the payment of premiums on contracts already written, it is exceedingly difficult to carry on an investment program without serious risks of loss; for just when the market value of assets is lowest an institution may be forced to liquidate a part of its investments in order to meet annuity payments which exceed the income. Institutions that write few annuity agreements are particularly susceptible to risks of loss from this source, for their new business may not bring in enough cash to meet annuity payments.

If the annuity funds of an institution are limited, an adequate investment program is hard to maintain. Diversification of assets is only possible when an institution has a large amount of funds at its disposal. Furthermore, institutions that have few funds rarely have an adequate staff employed to carry on their investment programs, so the chances of loss are increased.

In the college new funds are infrequently received. Moreover the net reserves must be maintained in assets which may be used in part to pay annuitants, and the balance upon maturity devoted to the ultimate purpose of the fund. Under these conditions it would seem that the college should adhere to investments which have a high degree of liquidity and high stability of market value.

Restrictions that are placed upon an institution's assets or methods of accounting for them may or may not increase its risks. Insurance companies seem to have profited by restrictive legislation, but colleges and universities often permit annuitants to place restrictions upon their methods of handling annuity funds and to dictate the specific assets within a type in which the funds are to be invested. When an annuitant gives real estate which may be desirable at the

⁸ *Time*, Vol. XXI, No. 15, April 10, 1933, p. 53.

time to an institution and requests that this real estate be held as long as he lives, he is making it impossible for this institution to dispose of this real estate when economic conditions so change as to make this particular piece of property less valuable. The chances for loss may be increased, then, by annuitants who specify that an annuity fund be held in specific assets.

SUMMARY

In this chapter the risks incident to writing annuity agreements were described. It was made evident that the college, due to the small number of agreements written, should not use a mortality table as a basis for writing annuity agreements, but rather adhere to the conservative policy of assuming a length of life in excess of the estimated length. The investment policy should seek to avoid a fluctuating income, and the college should adhere to investments which have a high degree of liquidity and a high stability of market value.

When only one of the three classes of risks is operating adversely, the institution may not suffer to any great extent and may be able to absorb the loss; but there is always the possibility that all three of the factors may be functioning adversely at the same time. Such a condition may cause serious loss. Any conclusion which may be drawn as to whether colleges or universities should write annuity agreements must be based upon consideration of these risks.

CHAPTER V

THE LIMITATION OF RISKS INCIDENT TO THE WRITING OF ANNUITY AGREEMENTS BY COLLEGES AND UNIVERSITIES

INTRODUCTION

In the preceding chapter the risks involved in the writing of annuity agreements were described and the conservative policy for colleges to follow with respect to such risks was suggested. In Chapter III the practices of colleges and universities in dealing with these risks were presented. In this chapter a procedure will be outlined whereby colleges and universities may reduce these risks to a minimum.

ACCEPTANCE OF FUNDS SUBJECT TO ANNUITY

Many of the risks involved in the writing of annuity agreements may be limited if an appropriate set of principles relating to the basic factors involved in the acceptance of funds subject to annuity is evolved and then adhered to faithfully. Such a body of principles is here set forth.

Schedule of annuity rates.—The annuity contracts of life insurance companies are written on the basis that the entire principal of the funds to be subject to annuity will be consumed in the administration of the fund and in the payment of annuities. Colleges and universities, however, largely assume that at least a part of the fund subject to annuity will remain as a residuum which may later be used by the institution in carrying on its educational program. There seems to be little agreement among colleges and universities as to what per cent of the fund which is to be subject to annuity should remain as a residuum when the annuity agreement matures. There is some indication, however, as shown in Table 10 that more colleges and universities seek to maintain the entire principal of the fund intact than any other per cent of it.

In Chapter IV it was made evident that the college, due to the small number of agreements written, should not use a mortality table as a basis for writing annuity agreements (such as is used by the large life insurance companies) but should adhere to the con-

servative policy of assuming a length of life in excess of the expectancy according to recent mortality tables of annuitants. Thus if a residuum of 100% is desired the amount of annuity which may be paid must of necessity approach the amount of income which the funds produce. As stated in Chapter IV, the net reserves of annuity funds should be invested in securities having high liquidity, high stability of market value and yield a steady and sure return. Such securities are represented by United States government bonds, the yield of which is between 3% and 3½%.

It is therefore recommended that a flat rate of 3% or 3½% of the annuity fund be paid the annuitant regardless of his or her age. If this principle were followed, the risk of loss would be reduced to one source, namely, shrinkage in the net reserve. The chances of loss through an annuitant living longer than expected and through a reduction in income would be considerably reduced.

If, however, an average residuum of less than 100% is contemplated—a practice which is not recommended—a schedule of rates assuming that all annuitants will live to an age which approximates the maximum (the age 85 is suggested when there is a normal spread of ages) might be used as a basis for writing annuity agreements.

Designation of annuity funds.—Annuity funds should be undesignated; that is, the residuum of the annuity fund should be unrestricted as to use. It is difficult, if not impossible, to make an intelligent designation for a fund which may not become available for the use of the institution until ten, twenty, thirty, or even forty years have elapsed. One thing of which we may be fairly certain is that economic and social conditions will continue to change and what may appear to be an essential need today may be unnecessary or superfluous tomorrow. If a donor or annuitant has enough confidence in an institution to place in its hands a sum of money which is to be subject to annuity until he dies, it should not require much persuasion to lead him to see that by refraining from stating the definite uses to which a fund is to be put several years hence he will be making it possible for the administrators of the institution to use the fund where it will do the most good at the time.

Because the residua of designated funds are not available as reserves to absorb losses from other annuity funds, all annuity funds should be unrestricted as to use. It is exceedingly difficult, if not impossible, to administer a series of designated annuity funds which

must be handled separately. When annuity funds are undesignated, they may be pooled and managed as a unit, thus increasing the possibility of having a sound investment policy.

Acceptable annuity fund assets.—An annuity agreement should be written preferably in consideration of cash only. Life insurance companies insist upon cash only, for in this way they are free to work out their own investment policies without outside influence. If an institution were to accept assets that were perfectly sound in themselves, it would find it exceedingly difficult to bring itself to dispose of these assets if they did not fit into its investment program. By accepting cash only an institution may diversify its investments without any obstacles being brought into its way. A college or university should be very reluctant to depart from this principle, but there may be times when it is advisable to make an exception as stated below.

When specific assets other than cash are offered in consideration of an annuity agreement, they may sometimes be accepted at their *market value* if these assets are suitable to the purpose and if the institution finds that these assets fit into its investment program, otherwise the assets should be sold and an annuity agreement written for the net proceeds.

When real estate is offered in consideration of an annuity agreement, it may be accepted as a *living trust* paying to the trustor the actual net income from such property, with the understanding that the institution shall have the right to sell such property, and that when such property is sold, the institution will write a single or a joint-life-and-survivor annuity agreement for the net proceeds received from the sale of such property at the rate paid to annuitants at the age of the donor at the time the sale of such property has been effected which would be 3% or 3½%, if the residuum of 100% is planned.

Real estate with a provision for the life tenancy of the annuitant should not be accepted for there is no income from the property and there is always the possibility that its value may be tremendously reduced.

The annuity agreement itself.—An annuity agreement should be a legally valid contract that is fully and clearly stated in writing. The agreement should represent a meeting of the minds of the persons involved, and it should omit no details. A well drawn agreement will prevent unnecessary misunderstandings and possible litigation.

a. *Terminology.*—The term “annuity agreement” should be used rather than “annuity bond” or “annuity contract.” An annuity agreement is not a bond in the sense in which this word is usually employed, and the word contract is to be avoided in order to differentiate the type of agreement written by colleges and universities from that written by life insurance companies where the entire principal is expected to be consumed in annuity payments.

The return to the annuitant should always be referred to as an “annuity” rather than as “interest.” The terminology here suggested is consistent with that recommended by the Sub-Committee on Annuities of the Committee on Financial and Fiduciary Matters of the Federal Council of the Churches of Christ in America.

b. *Restrictions.*—No annuity agreement should be written which restricts the institution as to its investments or as to its methods of accounting for the funds. The placing of restrictions upon the institution involves burdens of administration which make it difficult to carry out a unified program which would reduce the risk of loss to a minimum. Restrictions usually signify lack of confidence; and if the placing of restrictions upon the institution is justified, then it is a question as to whether the college or university should be writing annuity agreements at all.

CLASSIFICATION AND MANAGEMENT OF FUNDS SUBJECT TO ANNUITY

Segregation of annuity funds.—Annuity funds should be kept separate and distinct from all other funds in order to picture in one place the liabilities and obligations attached to these funds in connection with the assets which support these claims. The merging of annuity funds with endowment funds is unwise, for the principal of endowment funds is to be kept inviolate and the income alone used while the principal of annuity funds may be used to pay annuities if circumstances require such action. Only through the segregation of annuity funds from all other funds is it possible to fulfill the peculiar purposes of these funds.

Segregation of annuity fund assets.—Annuity fund assets should be kept separate and distinct from the assets of all other funds because the diverse purposes of the several types of institutional funds require varied investment policies. The assets of annuity funds should uniformly have ready marketability and high stability of market value. Assets of this character even though belonging to

several classes of annuity funds (endowment, plant, current expense, etc.) may be merged where desired in order to secure a satisfactory diversification of investments which is essential to a sound investment policy. A multitude of small funds is difficult to invest separately.

Use of annuity funds prior to death of annuitant.—No benefit from an annuity fund whose proceeds are to be used for a specific purpose should inure to an institution before the annuity agreement matures, unless the annuitant has been reinsured and the fund thus released. Due regard should be given to the establishment of appropriate reserves to cover contingent liability. The use of annuity funds prior to the death of the annuitant means that the annuities must be paid from other funds which practice may in time prove embarrassing to the institution. It is difficult to justify the use of the income from endowment funds or tuition for the payment of annuities which becomes necessary when the annuity fund has been used for the construction of a non-income producing building or even a dormitory. In some cases the amount of the funds subject to annuity approaches the total productive funds of the institution which means that an institution must keep its annuity funds intact or else run the serious risk of losing all its funds and defaulting on its annuity payments.

Administrative and promotional expenses.—Annuity administrative and promotional expenses should be charged to the annuity expense account, for in this way the net experience of the institution in writing annuity agreements is readily ascertainable. Few institutions now know what it costs them to administer their annuity program, if they did, they would probably not be writing annuity agreements.

Reserve valuations.—A determination of the relationship of the present value of the assets held to the estimated actuarial liability as determined by an actuary should be made periodically. Edward W. Marshall,¹ Actuary, Provident Mutual Life Insurance Company of Philadelphia, has said in an address on "Reserve Valuations of Annuity Funds": "It is quite possible for an organization to be deceived regarding its annuity experience, if it has been issuing an increasingly large volume of annuities in recent years. . . . A reserve valuation is important, so that the organization will know how much of the residual amounts obtained on the annuities termi-

¹ Alfred W. Anthony, *Regulations, and Reserves in Using Annuity Agreements*, pp. 23-24.

nated by death should be retained in the annuity fund to keep it at a level sufficient to meet reserve requirements for the annuities remaining in force. . . .

"A periodic reserve valuation is just as important to an annuity fund as a comparison of assets in hand and liabilities under deposit accounts would be for a savings fund. In each case the liability is a measure of the obligation assumed by the organization. The financial health of the organization can only be determined by a comparison of assets and liabilities."

The question may be raised as to how the actuarial liability may be computed on annuity funds held by colleges and universities. Ought it to be the amount which it would cost the college to reinsure the annuitant or should it be the net reserve required if it is assumed the annuitant will live to an age which exceeds that attained in accordance with the life expectancy table (the age 85 is suggested as being such an age when there is a normal spread of ages)? It would seem that the cost of reinsurance would represent the liability if it was the purpose of the college to reinsure, but not otherwise. Not having the broader distribution of risks, the college should provide the reserve necessary to pay the agreed annuity at the age used as the basis for determining the annuity rate.

ACCOUNTING FOR FUNDS SUBJECT TO ANNUITY

The success or failure of an institution's fiscal management is determined to some extent by its accounting methods. In the next few paragraphs are given the principles relating to the basic factors to be considered in the accounting for funds subject to annuity. These principles constitute minimum essentials.

Accounts for annuity funds.—The accounts for annuity funds should be kept separate and distinct from accounts for other funds. Annuity agreements constitute a decidedly different form of commitment from that of any other type of activity in which a college or university is engaged. For the purposes of conservative administration the whole amount paid by the annuitant should be credited to the annuity account. To the annuity account should be credited the income received on the investment of the principal, and from it should be deducted the annuities paid and the promotional and administrative expenses.

When funds subject to annuity are designated for specific purposes, they should be classified according to their ultimate designa-

tions and a separate account should be kept for each annuitant, showing the amount of each fund, assets held to the account of each fund, annuity rate, income, expenses, and other pertinent facts. This procedure assures an accurate account of the changes in the fund and avoids any possible criticism on the part of the annuitant. Such a procedure also gives a clear picture of the institution's financial experience in administering designated annuity funds.

Annuity funds should be classified as follows:

1. Funds unrestricted as to use.
2. Funds for current use not restricted to specific purposes.
3. Funds for current use restricted to specific purposes.
4. Loan funds not restricted as to recipient or terms of loan.
5. Loan funds restricted as to recipient or terms of loan.
6. Endowment funds, the income of which is not restricted.
7. Endowment funds, the income of which is restricted.
8. Plant funds not restricted to specific purposes.
9. Plant funds restricted to specific purposes.

Accounts for annuity funds should reflect which funds are invested separately and which are pooled for investment purposes.

The practice of investing annuity funds separately or as a whole should be guided by the investment policy. If it is the policy to invest all annuity funds in the highest grade of securities, having high marketability and high stability of market value, all annuity funds, regardless of designation, may be merged for investment purposes. If on the other hand it is desired to invest in assets suitable to the ultimate purpose of the several classes of funds, and considerations of marketability and stability of market value may be secondary, then investments should be grouped to conform to the ultimate designation of the funds. For example, all endowment funds subject to annuity would be invested as one group, but would not be merged with assets belonging to annuity funds of other classes. If specific assets as real estate have been accepted, these funds should be accounted for separately.

Accounts for the assets of annuity funds.—Accounts for annuity fund assets should be kept separate and distinct from accounts with assets of other funds. Annuity fund assets should not be merged with the assets of endowment funds or the assets of any other funds. Annuity funds may be expendable and endowment funds are not. When the assets of annuity funds and endowment funds

are merged, the temptation when funds are withdrawn from the pool is to liquidate those assets whose present value approach their book value. If the total present value of the pool is considerably below its book value, the effect of withdrawing assets equal to the book value of a fund is to penalize the funds remaining in the pool.

The accounts for annuity fund assets should indicate which annuity fund assets are pooled and which are separately invested. Such a procedure will give a clear picture of the investment practices of the institution.

Accounts for receipts and expenditures.—The accounts for receipts and expenditures incident to annuity agreements should be kept separate and distinct from other accounts with receipts and expenditures. "Any other system introduces confusion and tends to inflate the apparent income and expenses of the educational project."²

Profits and losses on investments.—Profits and losses on investments of annuity funds should be distributed to the annuity funds in order that the realized experience may be made apparent. The pooled investments of undesignated annuity funds might be served by a consolidated loss and gain account.

Reporting funds subject to annuity.—The reports of funds subject to annuity should be based upon the principles summarized in this chapter, and the forms of the reports should follow those recommended by the National Committee on Standard Reports for Institutions of Higher Education in its bulletin on *Suggested Forms for Financial Reports of Colleges and Universities* with this exception: all items relating to annuity agreements should be grouped under a separate classification and not merged with "endowment and other non-expendable funds."

The reports on funds subject to annuity should include the following items:

1. Amount of funds subject to annuity with both the book value and the determined net value to the institution indicated; that is, the net worth of the funds after the actuarial liability has been deducted should be indicated.
2. Assets held to the account of funds subject to annuity with the book value, par value, and market value indicated.
3. Annuity funds received during current year.

²Ralph J. Watts, "The Acquisition and Treatment of Annuity Funds," *The Educational Business Manager and Buyer*, Vol. VII, March, 1931, p. 17.

4. Income from investments.
5. Annuities paid during fiscal year.
6. Administrative expenses incident to annuities.
7. Promotional expenses incident to annuities.
8. Profit or loss on sale or maturity of assets.
9. Estimated actuarial liability on account of funds subject to annuity.

(Where reinsurance is contemplated the cost of such reinsurance would constitute the actuarial liability. If, however, the institution did not contemplate reinsurance, the estimated actuarial liability would be the cost of carrying the annuitant to an age which approaches the maximum age indicated by the life expectancy table.)³

³ See "reserve valuations," page 44.

CHAPTER VI

TRANSFER AND AVOIDANCE OF RISKS INCIDENT TO THE WRITING OF ANNUITY AGREEMENTS BY COLLEGES AND UNIVERSITIES

INTRODUCTION

The risks involved in the writing of annuity agreements make the possibilities of securing additional assets for a college or university rather remote if the annuity rates paid are more than the actual income received on the invested net reserves. These risks may, however, be transferred in some cases to a reputable life insurance company by reinsuring the annuitants with it, for a life insurance company writes thousands of annuity contracts and is equipped to cope with the risks incident thereto. Life insurance companies would welcome additional annuity contracts, for the larger the number of annuitants they have the greater is the possibility that the average life of their annuitants for any given age will approach the figure derived from their mortality tables. Life insurance companies can afford to write annuity contracts on the basis of mortality tables because of the large number of annuity contracts they write and have the possibility of writing. Colleges and universities deal with small numbers and therefore cannot afford to write annuity agreements on the basis of mortality tables; they must assume that their annuitants will live a number of years that approaches the maximum in order to safeguard themselves against loss from this source.

If a prospective annuitant of sixty years of age should offer a college or university \$10,000 as a consideration for an annuity agreement yielding him \$600 per year (annual payment) as long as he lived, the institution could not be sure that it would not lose money by entering an agreement on these terms. Table 30 gives the residuum that might be expected at the end of each year if the net reserve could be kept invested at 4% and there were no shrinkage in the value of the assets. The cents were dropped in the computation.

An analysis of Table 30 indicates that if the annuitant dies eleven years after the date he entered into an annuity agreement with

the college, the institution will have a residuum of approximately 75% of the original \$10,000, providing the entire net reserve was kept invested without loss and there was no reduction in yield. If the annuitant lived until he was eighty-nine years of age, the entire net reserve would have disappeared. When colleges and universities have only a few annuitants, it is not impossible for every one of them to reach the age of ninety. Even 226 annuity agreements is a relatively small number when compared with the thousands written by life insurance companies. It is difficult, if not impossible, to get an adequate spread of risks when only a small number of annuity agreements is written.

The illustration given is not an exaggeration, for many colleges write annuity agreements on the same basis as that assumed here, and several institutions pay higher rates than 10% of the age of the annuitant.

TABLE 30. NET RESERVES AT END OF EACH YEAR WHEN ANNUITY PAID IS \$600 AND THE INCOME ON THE NET RESERVE IS 4%, COMPOUNDED ANNUALLY

YEAR	NET RESERVE	INCOME 4%
1	\$10,000	\$400
2	9,800	392
3	9,592	383
4	9,375	375
5	9,150	366
6	8,916	356
7	8,672	346
8	8,418	336
9	8,154	326
10	7,880	315
11	7,595	303
12	7,298	291
13	6,989	279
14	6,668	266
15	6,334	253
16	5,987	239
17	5,626	225
18	5,251	210
19	4,861	194
20	4,455	178
21	4,033	161
22	3,594	143
23	3,137	125
24	2,662	106
25	2,168	86
26	1,654	66
27	1,120	44
28	564	22
29	—14	

If an institution wrote nine annuity agreements (the median number) for the same amount and on a basis similar to that assumed in Table 30 and the annuitants lived to an average age of seventy-eight, the college or university would realize an average residuum of approximately 50% if there were no gains or losses from income or investments. There remains the question as to whether 50% is a safe margin, for there is always the possibility that the assets would shrink 50% or more. Institutions that had money invested during the past three years know that a loss of 50% is not an impossibility. Many institutions would look upon themselves as exceedingly fortunate if they had lost only one-half of their invested assets.

Whenever an institution agrees to pay out more than the net income from a fund which is to be subject to annuity, it runs risks which it would do well to avoid. These risks could be transferred to an old line insurance company by either reinsuring the annuitant with one of these companies or by having the prospective annuitant purchase an annuity outright from a life insurance company and thus avoiding any possibility of contingent liability. A male annuitant of sixty years of age could purchase an annuity of \$600 per year from an old line life insurance company¹ for approximately \$6,480, thus leaving the college or university an outright gift of \$3,520 which it could put to immediate use in carrying on its educational program or it could invest this sum and permit its income to accumulate until it reached any given amount, as the Board of Trustees may decide.

If the prospective donor desired to give the college or university \$10,000 as a "living trust," the institution would suffer no losses due to the longevity of the trust or from fluctuations in income from invested assets, but it might witness a shrinkage in the value of the invested assets. The trustor would receive an income which might fluctuate from year to year unless the fund was invested in long term government bonds yielding a modest but sure and steady income of from 3% to 4%.

RE-INSURANCE

An analysis of the list of annuity fund assets held by colleges and universities will reveal that a very large per cent of these assets cannot be readily liquidated, and life insurance companies are reluc-

¹ See rates of any old line life insurance company.

tant to accept anything other than cash. Because of the nature of the assets held, many colleges and universities must continue to hold their annuity agreements until they mature and run whatever risks that are involved. A large number of institutions have all of their annuity funds invested in real estate and real estate mortgages for which there is no ready market today. There are other institutions that have their annuity funds invested in institutional property which is not saleable. In not a few cases it would be inadvisable to re-insure an annuitant with a life insurance company because of possible restrictions or opposition of the annuitants. In no case should an annuitant be re-insured without his consent.

Some colleges and universities have invested their annuity funds in assets which may be turned into cash with little or no loss. These institutions may readily arrange with an old line life insurance company to take over their annuity agreements. If this were done, the insurance company would assume the risk of longevity of the annuitants and the risks of depreciation in asset value and income. The college or university, however, would retain a contingent liability unless it secured from the annuitant a release from such liability.

The advantages to be derived from re-insuring annuitants with old line life insurance companies may be briefly stated to be as follows:

First, all of the risks incident to the handling of the annuity agreements rest definitely hereafter with the re-insurer, except for possible contingent liabilities that have not been waived.

Second, the institution should have a portion of its annuity fund assets free of liability at its command for immediate use or for accumulation, as it may desire.

Third, there should be a gain in the confidence of the annuitants of the college or university.

Fourth, if the institution adopts the practice of re-insuring each annuitant as soon as he enters into an agreement with the college it will look well to the size of the margin of gain for the institution, and it will also tend to inhibit unwise commitments.

Fifth, in many cases large sums of money will be made available for the immediate use of the college or university. This advantage is of particular significance during this period of depression when institutions are hard pressed for funds.

The re-insuring of annuitants with reputable old line life insurance companies is a method of transferring the risks incident to the writing of annuity agreements from the college or university to the life insurance company. This practice has been followed by the Board of Pensions and Relief of the Methodist Episcopal Church² for several years.

LIVING TRUSTS

Definition.—A living trust agreement, or “voluntary trust,” is an agreement in accordance with which a person gives money, or property, to a trustee, which binds itself in accepting the trust to hold and administer the gift, and to pay the net income therefrom to beneficiaries in proportions and upon dates stated in the agreement—one of the beneficiaries may be the trustor himself during life and thereafter to heirs or institutions as directed in the agreement. A living trust agreement may be differentiated from an annuity agreement in that in the former case the principal of the gift remains intact and only the net income, which may vary from year to year, is paid out, whereas in the latter case the annuity is a stipulated amount which may or may not exceed the income from the fund subject to annuity. It may be readily seen that the living trust avoids the risks to the institution that are characteristic of the annuity agreement.

A substitute for annuity agreements.—Dr. Alfred Williams Anthony has written a leaflet³ on Living Trusts in which he describes their uses and advantages. Dr. Anthony says that “the Living Trust is an admirable substitute for an annuity contract. Under an annuity contract the annuitant receives an annual payment which, if less than the income of the fund, permits the fund itself to grow, but, if more than the income of the fund, which is usually the case, diminishes the fund, so that at the conclusion of the trust the fund remaining is less than the original gift. Annuity principal sums, as a rule, are expected to be diminished.

“The Living Trust is equitable and fair to both parties. To the trustor, who is in effect an annuitant, it yields the entire income.

²T. A. Stafford, “Reinsurance of Annuities,” *Methods and Plans in Using Annuity Agreements*, edited by Alfred W. Anthony, Federal Council of Churches, New York, 1931, pp. 16-23.

³Wise Public Giving Series, No. 15, Committee on Financial and Fiduciary Matters of the Federal Council of the Churches of Christ in America, New York, 1928, pp. 12.

To the ultimate beneficiary it yields the entire principal. The income becomes a fair and equitable annuity.

"If the charitable motive is dominant in a benefactor, who seeks an annual income for himself, his widow or some other person, he will be glad to make his gift to the beneficiary as large as possible. When the income in its entirety is paid to him, then his gift in its final form is exactly 100% of its original amount."⁴

Types of living trusts.—There are two general types of living trusts: the "revocable" and the "irrevocable." A revocable living trust may be changed by the trustor by "terminating it altogether and taking back into his own hands the gifts he made, or by so altering it that it will accomplish other purposes which he may name, or in different ways as he may later determine."

"Under a 'revocable' trust, at the death of the trustor the property in trust is regarded, for the purpose of taxation, as though it were still within his estate, for he has not parted with dominion over the property in a final taxation sense."⁵

The revocable living trust is subject to the whim of the benefactor and is not to be preferred; on the other hand, the irrevocable living trust is to be desired by colleges and universities.

In an irrevocable living trust the property or financial consideration given is put entirely outside of the estate of the trustor. "He no longer owns it and can have no further control over it in a legal sense. He has given it away absolutely and finally in trust for the purposes specified."⁶

Under this form of a living trust, "no inheritance taxes, state or federal, can be levied and collected because the property ceased to belong to the man at the time that he put it into the hands of the trustee and with final disposition he is allowed no further claim upon it. To this there is an exception when the transfer was made in contemplation of death. He must not reserve any use or enjoyment to himself or power of appointment, and the trust must continue to be 'irrevocable' if the trust estate is to be free of inheritance taxes, except as the interest going to charity may be exempt."⁷

Varieties of living trusts.—There are several varieties of living trusts, and Dr. Anthony describes them as follows: "The trustor

⁴ *Op. cit.*, pp. 8 and 9.

⁵ *Op. cit.*, p. 3.

⁶ *Op. cit.*, p. 3.

⁷ *Op. cit.*, pp. 3 and 4.

under both the revocable and irrevocable forms of trusts may make provision in general as follows:

"1. For himself, he may provide that during his life, or for a definite period of years during his life, he himself shall receive the income in its entirety or in part as he may select, together with all extraordinary dividends, whether stock dividends or cash.

"2. He may provide that a proportion of the income shall be paid to him, another proportion paid to persons whom he may designate for their lives or for a period of years less than life, and another portion to some charitable object. He may vary these proportions as he may see fit. He may have the income paid entirely to members of his family, or to certain annuitants for whom he wishes to care during their lives, and subsequently to certain charities which he may select.

"3. In most states he must so plan that the trust to benefit persons shall terminate upon the death of a certain designated person or persons living at the time his trust is established. A few states have laws which permit the continuance of trusts only during the term of 'two lives in being.' A majority of states, however, cling to the common law rule of limiting trusts on 'lives in being' without specifying the number. The object of such laws is undoubtedly to prevent the tying up of property through unnumbered generations, an American principle, unlike the principle of primogeniture and the establishment of nobilities and castes permissible in some other countries. . . ."⁸

Advantages of living trusts.—The advantages of the living trust are clearly and briefly stated by Dr. Anthony who says:

"1. The possibility of litigation is reduced to a minimum. The donor is living and knows his own purposes and makes them plain, not simply in written language but by actual action. There is no uncertainty. There can be no contest over a will or over the meaning of legal phrases.

"2. It is the most economical method of distributing property. It involves no costs of court or of testamentary administration. If it is irrevocable, it may not be subject to inheritance taxes.

"3. A voluntary trust allows a man to put the execution of his own will into practice. He can try the persons and the organizations which he wishes to benefit by allowing them to have the benefits

⁸ *Op. cit.*, pp. 4 and 5.

while he is still living and is able to advise, or in some cases train them in the use of property.

"4. Making these things definite and sure brings to the donor a great sense of security and of satisfaction, and even of joy. He becomes a participant in the benefits which so frequently are left for posthumous realization."⁹

Another advantage that accrues from a living trust is that the institution receiving the trust runs no risk of loss as is the case when a fund subject to annuity is accepted, for only the net income is paid to the trustor. The benefits to be derived from a living trust are definite and need cause the beneficiary no anxiety. The income to the trustor, however, may fluctuate from year to year.

Some institutions now have living trusts.—There are some colleges and universities that regard the risks attached to the acceptance of funds subject to annuity too great and will not incur them but will accept living trusts. One college that made a careful study of its experience in writing annuity agreements has discontinued the practice and now accepts only living trusts. When the president of this institution was asked for his reasons for this action, he replied in a letter: "We gave up the practice of writing up annuity agreements in favor of the living trusts because the living trusts involved no risk. There is at least a possibility that the income on invested funds may diminish in times like these or that investments may be lost. We can never be sure that we shall go on with the prosperity which had attended the last decade so that we felt that we were assuming too great a risk when we promised to pay a high dividend with the possibility of receiving an extremely small income. It looks too much like a gamble with the dice loaded against you."

PRINCIPLES RELATING TO LIVING TRUSTS

Basic factors to be considered in accepting living trusts.—When an institution writes a living trust agreement, it should be certain that the designation of the fund will further the purposes of the institution. This principle needs little amplification, for it is obvious that an institution does not want to undertake obligations which may prove embarrassing in future years. The safest plan is to accept only such funds whose designations are general but consistent with

⁹ *Op. cit.*, p. 7.

the purposes of the institution or funds which may be used as the board of trustees see fit.

A living trust agreement should be a legally valid contract that is fully and clearly stated in writing. The Uniform Trust for Public Uses is acceptable.

Basic factors to be considered in the classification and management of living trust funds.—Living trust funds should be kept separate and distinct from all other funds. After the living trust has matured the fund may be merged with any fund of similar designation. The peculiar nature of these funds necessitates their being kept separate and distinct from all other funds, especially if the living trust is revocable.

The assets of living trust funds should be kept separate and distinct from the assets of all other funds, for it is only in this way that controversy may be avoided regarding the income from these funds. Except in the case of revocable living trusts, the assets of the various living trusts may be by agreement merged for investment purposes and the trustors paid the average net income. When specific assets other than those considered suitable for the investment of such funds are accepted in consideration of a living trust agreement, they should be kept separate and distinct from all other assets, because the uncertainties of income should be kept related to the fund to which they belong.

Administrative and promotional expenses incident to living trusts should be charged to the living trust funds, for it is only in this way that the institution may know what it costs to handle this phase of its enterprise.

Basic factors to be considered in accounting for living trust funds.—Accounts for living trust funds should be kept separate and distinct from other accounts with funds. Living trusts constitute a decidedly different form of commitment from any other type of activity in which the college or university is engaged, and for this reason the accounts for its funds should *not* be grouped with the accounts for endowment or any other type of fund.

Living trust funds should be classified according to their ultimate designations, for this procedure makes possible a ready knowledge of the amounts to become available from this source for any particular purpose.

The accounts for living trust funds should reflect which funds are invested separately and which are pooled for investment pur-

poses. This same principle should apply to the assets of living trust funds.

The accounts for the assets of living trust funds should be kept separate and distinct from the accounts for the assets of all other funds. Such a procedure makes it possible to readily demonstrate whether the assets for these funds have been maintained in suitable investments and have not been used for other institutional purposes.

The accounts for receipts and expenditures incident to living trusts should be kept separate and distinct from other accounts for receipts and expenditures.

Basic factors to be considered in reporting living trusts.—In presenting reports on living trusts the following items should be included in order to assure a complete picture of this phase of the institution's transactions:

1. The amount of the living trust funds.
2. The assets held to the account of these funds with their book value, par value, and market value indicated.
3. Net income.

CONCLUSION

The living trust accomplishes the same purposes as the annuity agreement, is flexible, and is devoid of risks to the institution, but it does not assure the trustor a sure and steady income unless he is content to receive a modest return and have the institution invest the fund in government securities. The living trust has all of the advantages of the annuity agreement as far as the institution is concerned and none of its risks. If an institution wishes to avoid the risks incident to the writing of annuity agreements, it may well give serious consideration to the living trust.

CHAPTER VII

CONCLUSION

This study of the annuity agreements of colleges and universities has accomplished the following things:

First, it has indicated the extent to which colleges and universities write annuity agreements.

Second, it has shown the practices which some colleges and universities recognize in accepting, classifying and administering, and accounting for and reporting funds subject to annuity.

Third, it has presented evidence which indicates to some extent the risks incident to the writing of annuity agreements. These risks were involved in the longevity of annuitants, the uncertainties as to the yield from invested net reserves, and the hazards attending investment and realization.

Fourth, it has set up a body of principles relating to the acceptance of funds subject to annuity, their classification and management, and accounting for and reporting annuity funds which would tend to reduce the risks incident to the writing of annuity agreements to a minimum.

Fifth, this study has set forth the advantages of reinsuring annuitants with old line life insurance companies as a method of transferring the risks incident to writing annuity agreements from colleges and universities to organizations that are equipped to cope with these risks. This study has also presented the living trust as a means of avoiding the risks incident to annuity agreements without loss of their advantages.

GLOSSARY

1. Annuity agreement.—“This term refers to the entire agreement and the execution of it, in accordance with which a person gives money, or other substantial equivalent, to an organization, which binds itself by an agreement to hold and administer the gift, and to pay to the donor an annual sum, varying according to the age of the donor, and ceasing only at the donor's death.”¹
2. Annuity.—“The word ‘annuity,’ strictly speaking, refers to an annual payment but has been defined as ‘a periodical payment to continue during a given status.’”²
3. Annuitant.—“The person during whose life the annuity is paid is called the *annuitant*.”³
4. Joint-life-and-survivor annuity.—“Annuities are payable during the joint life of the annuitants and during the lifetime of the survivor, either yearly, half yearly, quarterly or monthly; the first payment due a year, half year, quarter year or month after register date, according to period selected. There is no allowance of a proportionate amount for any fraction period to date of death.”⁴
5. Life annuity.—“Life annuities are payable during the lifetime of the annuitant either yearly, half yearly, quarterly or monthly; the first payment beginning a year, half year, quarter year or month after register date. No allowance of proportionate amount for any fraction period to date of death.”⁵
6. Living trust agreement.—A living trust agreement is an agreement in accordance with which a person gives money, or property, to a trustee, which binds itself in accepting the trust to hold and administer the gift, and to pay the net income therefrom to beneficiaries in proportions and upon dates stated in the agreement, one of the beneficiaries may be the trustor himself during life and thereafter to heirs or institutions as directed in the agreement. A living trust agreement may be differentiated from an annuity agreement in that in the former case the principal of the gift remains intact and only the net income, which may vary from year to year, is paid out, whereas in the latter case the annuity is a stipulated amount and may or may not exceed the income from the fund subject to annuity.
7. Residuum.—The residuum represents that portion of the gift which remains after the payment of all annuities and administrative charges.

¹ Anthony, Alfred W. *Annuity Agreements of Charitable Organizations*, Federal Council of Churches of Christ in America, New York, 1927, Preface.

² MacLean, Joseph B. *Life Insurance*, McGraw-Hill Book Co., New York, 1932, p. 51.

³ *Ibid.*, p. 51.

⁴ Equitable Life Assurance Society Annuity Rate Book, p. 36.

⁵ *Ibid.*, p. 3.

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Dr. Anthony discusses the mixed motives involved in the financing of colleges by means of annuity agreements.

Cassatt, Paul C. "Annuities for Colleges," *Association of University and College Officers of the Eastern States*. No. 9, pp. 48-60. Murray Printing Company, Cambridge, Massachusetts, 1928.

The Comptroller of Vassar College evaluates in this article the different types of gifts to colleges and outlines methods by which colleges and universities may administer annuities at considerable "profit." The author urges colleges to cooperate in the standardizing of rates and accounting procedures.

Morey, Lloyd. "Efforts Toward Greater Uniformity in Educational Finance Reports," Association of Governing Boards of State Universities and Allied Institutions. *Proceedings*, November, 1930, pp. 82-89. University of North Carolina, Chapel Hill, North Carolina, 1930.

The limitations automatically set upon the efficiency of a uniform accounting system for institutions of higher learning by the difference of their educational departments. Some of the common items of major expense are examined and found adaptable to a uniform accounting system. The author points out that the National Committee on Standard Reports for Institutions of Higher Learning presents five types of financial reports which may be prepared uniformly by all institutions to facilitate the analysis and comparison of their respective expenditures.

New York Stock Exchange Bulletin. Vol. 4, No. 4. April, 1933.

This bulletin contains economic statistics which relate to the securities market, particularly to the New York Stock Exchange.

Watts, Ralph J. "The Acquisition and Treatment of Annuity Funds," *The Educational Business Manager and Buyer*. Vol. 7. March, 1931.

The author, who is Business Manager of Lawrence College, recommends a policy for acquiring and handling annuity funds.

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